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ABSTRACT

In 1984, the Connecticut General Assembly authorized the creation of mastery tests in mathematics and language arts (listening, reading, and writing skills) for grades 4, 6, and 8. Criterion-referenced tests were developed to assess the essential skills that should be mastered at the end of grades 3, 5, and 7 and to identify students in need of remediation. Connecticut educators identified the skills and determined their appropriateness for each grade. The Grade 4 Mastery Test results for 1990 are provided. The Grade 4 Mathematics Test assessed 25 objectives in conceptual understanding, computational skills, problem solving/applications, and measurement/geometry. The 104-item language arts test covers reading/listening and writing/locating information and examines nine objectives. In 1990, fourth-graders mastered an average of 21.2 of the 25 objectives, up slightly from the preceding year's figure of 20.6. In language arts, fourth-graders mastered an average 6.3 of the 9 objectives, as they did the preceding year. Writing scores and reading scores for grade 4 increased slightly. The scoring of the tests and equating to enable comparison with other years are discussed. Results for 1985 through 1990 are compared. Twelve charts summarize student achievement data. Thirteen appendices present test construction practices, specific objectives, the remedial standard setting process and committees, an overview of holistic scoring and marker papers for holistic scoring, the analytic rating guide and marker papers for analytic scoring, sample mastery test score reports, fall 1990 state by district reports in mathematics and language arts, the percentage of students meeting the statewide goal in each content area by district on the Connecticut Mastery Test, types of community classifications, education reference group descriptions, and student participation rates. (SLD)

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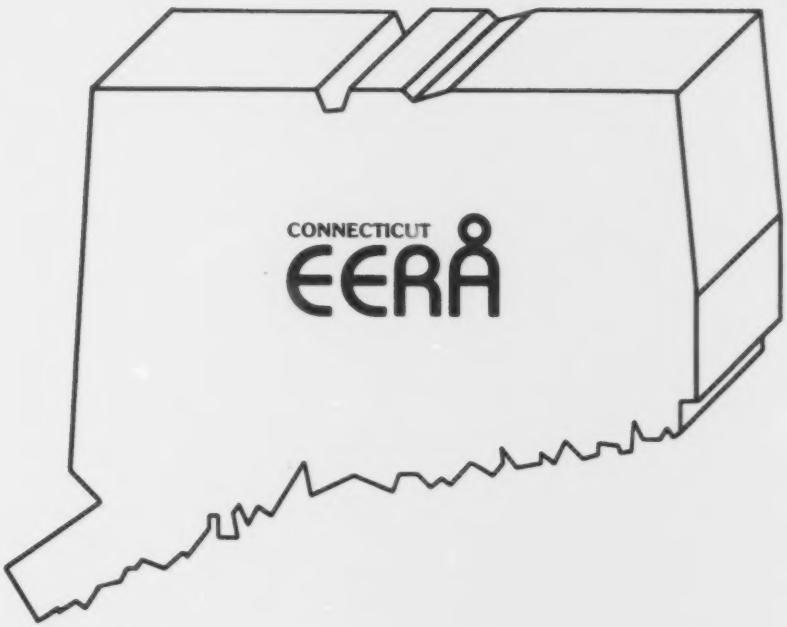
GRADE 4 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS 1990-91



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GRADE 4 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS: 1990-91

CONNECTICUT STATE DEPARTMENT OF EDUCATION

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LEGISLATIVE BACKGROUND

In June 1984, the General Assembly of the State of Connecticut amended Section 10-14 m-r of the Connecticut General Statutes, an act concerning Education Evaluation and Remedial Assistance (EERA). This law provides that:

- By May 1, 1985, each local or regional board of education shall have developed and submitted for State Board of Education approval, a new plan of educational evaluation and remedial assistance. Each plan had to address the following:
  - the use of student assessment results for instructional improvement;
  - the identification of individual students in need of remedial assistance in language arts/reading and mathematics;
  - the provision of remedial assistance to students with identified needs; and
  - the evaluation of the effectiveness of the instructional programs in language arts/reading and mathematics.
- The State Board of Education shall administer an annual statewide mastery test in language arts/reading and mathematics to all fourth-, sixth- and eighth-grade students, with the following exceptions:
  - Special Education students who are excluded by a Planning and Placement Team (PPT) decision;
  - students who have been enrolled in an "English as a Second Language" program for two years or less; or
  - students enrolled in a Bilingual Program (as defined in Section 10-17e of the Connecticut General Statutes) for two years or less.
- Each student who scores below the statewide remedial standard on one or more parts of the eighth-grade mastery examination or the ninth-grade proficiency test shall be retested. These students shall be retested annually, using the eighth-grade mastery test, only in the deficient area(s) until such students score at or above the statewide remedial standard(s).
- Biennially, each local or regional board of education shall submit to the State Board of Education a report which includes indicators of student achievement and instructional improvement.
- On a regularly scheduled basis, the State Board of Education shall complete field assessments of the implementation of local EERA plans.

- On an annual basis, test results and low income data shall be used to determine the distribution of available state funds to support remedial assistance programs.

The purpose of this report is to provide an overview and summary of the implementation of the fourth-grade Connecticut Mastery Test. The mastery test assesses how well each student is performing on those skills identified by content experts and practicing educators as important for students entering fourth grade to have mastered.

The Connecticut Mastery Test is a critical element in Connecticut's agenda to attain educational equity and excellence. The testing program assesses essential skills in mathematics and language arts, including listening, reading and writing, for grades four, six and eight students. Student achievement is measured and reported in relation to specific learning objectives that students reasonably can be expected to have mastered by the end of grades three, five and seven.

The Connecticut Mastery Test provides valuable educational information which can be used to improve instruction and elevate the achievement of Connecticut's students. The test results are reported in a manner that identifies how well each student is succeeding in relation to clearly defined and meaningful standards. It is my hope that educators throughout the state use the results as a tool to gain a better understanding of the learning occurring in our classrooms and the ways to increase learning in the future.

Connecticut is committed to an annual cycle of assessment in order to promote:

- the monitoring of individual student achievement;
- the evaluation of instructional program effectiveness;
- educational goal setting; and
- remedial assistance program improvement.

I encourage you to carefully review the mastery test results provided at the student, classroom and district levels. The Department is prepared to assist local school districts in the areas of curriculum and professional development and test interpretation.

Gerald N. Tirozzi
Commissioner of Education

OVERVIEW OF THE MASTERY TESTING PROGRAM

In the spring of 1984, the Connecticut General Assembly amended the Education Evaluation and Remedial Assistance (EERA) legislation to authorize the creation of mastery tests in the basic skill areas of mathematics and language arts, including listening, reading and writing skills. The tests were to be established for grades four, six and eight.

The goals of the mastery testing program are:

- earlier identification of students needing remedial education;
- testing a more comprehensive range of academic skills;
- setting high expectations and standards for student achievement;
- more useful test achievement information about students, schools and districts;
- improved assessment of suitable equal educational opportunities; and
- continual monitoring of students in grades four, six and eight.

The type of test that best addresses these goals is a criterion-referenced test. Criterion-referenced tests are designed to assess the specific skill levels of students. Such tests usually cover relatively small units of content. Their scores have meaning in terms of what each student knows or can do. Test results are used to identify the areas of strengths and weaknesses of each student.

MASTERY TEST CONTENT

The CMT is designed to assess essential language arts/reading, writing and mathematics skills that can reasonably be expected to be mastered by most students by the end of the third, fifth and seventh grades. The specific skills to be tested within these content areas were identified by committees of educators from throughout the state. In addition, surveys were sent to many teachers, administrators and parents to determine the appropriateness of these skills for the Mastery Test. A complete description of the procedures used in the development of the fourth-grade CMT can be found in Appendix A (p. 31).

Mathematics

The Mathematics Advisory Committee recommended a grade four mathematics test that assessed twenty-five (25) specific objectives in four domains: (1) Conceptual Understanding; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. There are four test items per objective for a total of 100 items on the mathematics test. A detailed list of domains and objectives is given in Appendix B (p. 35).

Language Arts

The Language Arts Advisory Committee recommended a 103-item grade four language arts test that covers two domains: Reading/Listening and Writing/Locating Information. Nine (9) objectives were recommended by the Language Arts Advisory Committee.

The general content of Reading/Listening consisted of narrative, expository and persuasive passages on a variety of topics measuring a student's ability in: (1) Literal Comprehension; (2) Inferential Comprehension; and (3) Evaluative Comprehension. Audiotapes were used to assess students' listening comprehension ability in: (1) Literal Comprehension and (2) Inferential and Evaluative Comprehension. The Degrees of Reading Power (DRP) test was also used to assess reading. The DRP test included eight (8) passages and fifty-six (56) test items. It was designed to measure a student's ability to understand nonfiction English prose at different levels of reading difficulty.

The general content area of Writing/Locating Information consisted of three components. First, there was a writing sample for direct, holistic assessment of student writing. Each student was asked to write a composition on a designated topic. Writing was then judged on a student's demonstrated ability to convey information in a coherent and organized fashion. Second, the mechanics of good writing, which was defined as (1) Capitalization and Punctuation, (2) Spelling, Homonyms and Abbreviations and (3) Agreement, was assessed in a multiple-choice format. Third, Locating Information (Schedules, Maps, Index and Reference Use and Dictionary Meaning), measured students' ability to find and use information from the sources listed. A detailed list with objectives and number of items per objective is given in Appendix C (p. 37).

FUTURE DEVELOPMENT

The Connecticut State Department of Education (CSDE), in conjunction with content consultants and various CMT advisory committees, has begun the development of the second generation of the CMT. The current CMT is under review to determine which skills are appropriate for inclusion on the new test. In addition, new content areas and other forms of assessment techniques (e.g., performance assessment and short-answer questions) are being considered. It is anticipated that the second generation CMT will be administered for the first time statewide in the fall of 1993. Items for this set of exams will initially be piloted in the fall of 1991 followed by a second pilot in the fall of 1992.

SETTING MASTERY STANDARDS BY OBJECTIVE

The essence of the Connecticut Mastery Test (CMT) is the establishment of a specific mastery standard against which each student's knowledge and competency on each objective can be compared. The mastery test incorporates appropriate and challenging expectations for Connecticut public school students. The goal of the CMT Program is for each student to achieve mastery of all objectives. The objectives being tested were identified as appropriate and reasonable for students at each of the grades tested. These tests are designed to measure a student's performance on these specific objectives.

The process of establishing the mastery standards by objective used a statistical method that required two decisions to be utilized. The first decision defined a student who mastered a particular skill as one who had a 95% chance of correctly answering each item within the objective. The second decision was that the specific standard for each objective would identify 99%

of the students who mastered the skill. By applying the two decision rules stated above to a binomial distribution table, mastery standards were established for the 25 mathematics objectives and the 9 language arts objectives.

The mastery standards are as follows:

- In mathematics, for each of the 25 objectives, a student must answer correctly at least 3 out of 4 items.

- In language arts, for the 9 multiple-choice objectives with varying numbers of items, a student must answer correctly the following numbers of items:

	# Items Correct for Mastery
WRITING MECHANICS	
(1) Capitalization & Punctuation	9 out of 12
(2) Spelling	7 out of 9
(3) Agreement	11 out of 15
LOCATING INFORMATION	
(4) Schedules, Maps, Table of Contents, Title Page and Dictionary	8 out of 11
LISTENING COMPREHENSION	
(5) Literal	5 out of 7
(6) Inferential and Evaluative	9 out of 13
READING COMPREHENSION	
(7) Literal	9 out of 12
(8) Inferential	10 out of 14
(9) Evaluative	7 out of 10

No mastery standards were set for the two holistic language arts measures, neither the Degrees of Reading Power (DRP) test nor the Writing Sample, since these measures are not composed of objectives on which mastery could be assessed.

SETTING REMEDIAL (GRANT) STANDARDS

In addition to mastery standards, Section 10-14 m-r of the Connecticut General Statutes requires that the Connecticut State Board of Education establish statewide standards for remedial assistance in order to meet two responsibilities:

- to identify and monitor the progress of students in need of remedial assistance in language arts/reading and mathematics as part of the EERA field assessments; and

- o to distribute EERA funds based on the number of needy students statewide, as well as for use in the Chapter 2 and Priority School District Grants.

Students who score below the remedial standard(s) are eligible for services provided for in EERA legislation. Remedial standards were established by the State Board of Education acting on the recommendations of committees that represented Connecticut citizens and educators. The standard-setting committees recommended the following remedial standards:

1. In mathematics, a student who answers fewer than 69 of the 100 items (69%) correctly is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

2. In reading, a student whose Degrees of Reading Power (DRP) unit score is lower than 41 is required to receive further diagnosis and, if necessary, to be provided with remedial assistance.

3. In writing, a student receiving a total holistic score less than 4 is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

The mastery and remedial standards were established by the State Board of Education on June 23, 1985. For a detailed explanation of the remedial standard-setting process, see Appendix D (p. 39).

STATEWIDE ACHIEVEMENT GOALS

In addition to mastery and remedial standards, statewide achievement goals have been established in the content areas of mathematics, reading (DRP) and writing. These goals represent high expectations and high levels of achievement for Connecticut public school students.

The achievement goals are as follows:

- o In mathematics, all students must master 22 of 25 objectives tested.

- o In reading, a student must score a Degree of Reading Power (DRP) unit score of 50 with 70% comprehension.

- o In writing, a student must score a total holistic score of 7 on a scale of 2 to 8.

STUDENT GROWTH OVER TIME

The Connecticut Mastery Test (CMT) program is designed to provide criterion-referenced information about the level of student mastery of objectives in grades four, six and eight. However, the basic scores reported for the mastery tests do not provide a system for evaluating achievement growth from grade four to grade six to grade eight. This is so because mastery decisions are based on student performance (mastery/non-mastery) on

objectives that are unique to grade level. Mastery of objectives cannot be compared directly across grade levels and tests because of the differences in the number of objectives, curriculum content and levels of difficulty. In order to make valid interpretations across grade levels, the mastery test performance must first be linked using a procedure called vertical equating.

Purpose of Vertical Equating

Vertical equating is a psychometric technique for comparing tests at all ability levels. This is accomplished by putting them on a new scale which is common to the tests. Vertical equating is based on two assumptions. The first is that learning is continuous. The second is that instruction in each area is related to increased achievement in that area. These assumptions enable test developers to create a scale score that covers a wide range of content over several grades. The type of equating that leads to the development of these "growth scales" is known as vertical equating. The development of growth scales is a common practice and has been used successfully in the development of a variety of achievement test batteries. The purpose of vertical equating is to provide one scale score system which can be used to compare performance across multiple grade levels. This score system enables test users to interpret test score information over time without altering the basic nature of the testing program. This achievement growth can be monitored over time on the basis of student performance on the CMT across grades.

Development of Vertical Scales

In order to develop a vertical scale, performance on the grade four, grade six and grade eight mastery tests was statistically linked. This was accomplished during the 1987 administration of the CMT using representative statewide samples of approximately 5,000 sixth-grade students and approximately 7,000 eighth-grade students. Each group of students at grade six and grade eight was administered the appropriate on-grade level test form of the CMT along with one below-grade level section of the CMT. Specifically, each group of eighth-grade students took the grade eight test as usual and a part of the grade six test. Likewise, each sixth-grade group took the grade six test as usual along with a section of the grade four test. Each sample of students took only one below-level section of the CMT involving approximately one hour of additional testing time. Performance on the below-level items was not counted toward the CMT scores of individual students. For each of these linking samples, item difficulty estimates were obtained for the on-grade and below-grade level items by analyzing all items together as one test. Once items from the on-grade and below-grade level tests were linked, item difficulties from each level of the CMT were adjusted to a common metric to produce the vertical scale.

Vertical scales were established in the content areas of mathematics and the reading comprehension section of the language arts test. For each grade and content area, every correct score corresponds to a specific value on a common score scale (vertical scale). Each of the vertical scales was constructed so that each scale score point represents the same theoretical achievement level whether derived from a score on the grade four test, a score on the grade six

test or a score on the grade eight test. This allows valid interpretations of growth across time using tests differing in content, length and item difficulty. All items on the mathematics and reading comprehension tests were used in the development of the vertical scales. The writing and language arts tests were not scaled because of the nature of these assessment processes. The Degrees of Reading Power (DRP) test employs DRP unit scores which are already on a common scale across grades, obviating the need for any other development. (For more information see Congero, W.J., 1989, The Development of Vertical Scales to Enhance the Evaluation of Assessment Data. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. This paper is available through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.)

Scaled scores can be used to measure growth over time because CMT scores from all three grade levels have been placed on a common scale. These scales provide a means of monitoring students' academic progress from grade to grade. Before the scales were developed, it was difficult to assess the performance of groups of test takers as they moved from grade to grade because of differences in test length, curriculum content covered and levels of difficulty on the fourth-, sixth- and eighth-grade tests.

Since students who took the fourth-grade test in 1987 subsequently took the sixth-grade test in 1989, change in test performance can be assessed across two years' time. Similarly, change in performance can be assessed for 1990 sixth graders who took the grade four test in 1988. A summary of the overall growth in performance for these two groups of students in the content areas of mathematics and reading comprehension can be found in the 1990-91 Grade 6 Summary and Interpretations Manual. Students who took the fourth-grade test in 1985 subsequently took the sixth-grade test in 1987 and the eighth-grade test in 1989. Similarly, students who took the fourth-grade test in 1986 subsequently took the sixth-grade test in 1988 and the eighth-grade test in 1990. A summary of the overall growth in performance for these groups of students in the content areas of mathematics and reading comprehension can be found in the 1990-91 Grade 8 Summary and Interpretations Manual.

NORMATIVE INFORMATION

The CMT program is designed to provide detailed information about fourth-, sixth- and eighth-grade students' mastery of specific skills and objectives. The provision of national norms with CMT results is intended to enhance the usefulness and flexibility of mastery test information by offering a bridge to conventional norm-referenced testing programs. The decision to provide normative information with the CMT does not change the essential purposes of our criterion-referenced testing program. The CMT will continue to be used for diagnostic and other instructional purposes with results reported at the student, classroom, school, district and state levels.

In particular, national norms provide greater:

- **Test Economy**. By providing national norms with CMT results, school districts can eliminate their standardized testing programs at these grades, thus saving money and undue testing time while retaining normative data.

- **Test Efficiency.** Federal compensatory programs require the systematic testing of students using instruments that can provide normative information. Because norms are provided with the CMT, school districts will not have to "double test" compensatory program students. This service allows for increased instructional time for these students.

- **Test Interpretability.** Criterion-referenced test (CRT) programs may be criticized because the public has difficulty interpreting CRT performance. National norms will assist in the interpretation of CMT performance by providing a traditional benchmark with which the public is familiar.

Development of Norms

In order to provide estimated national norm-referenced data based on CMT performance, items on the CMT were statistically linked to items on a nationally norm-referenced test (NRT). Content-appropriate items from a nationally normed host test were included on the CMT to provide a common referent to both tests. Test equating procedures were then used to link CMT items with the normed test by placing all the items on a common scale. With this linkage in place, estimates of how the performance of Connecticut students compares to a national sample could be made. The NRT used to accomplish this task was the sixth edition of the Metropolitan Achievement Test (MAT-6), normed in 1986. The equating of the CMT to the MAT-6 enabled group summary scores on the CMT to be interpreted relative to the MAT-6 nationally representative normative data.

The CMT was initially equated to the MAT-6 during the pilot testing phase to investigate the relationship of the test content and material between the two tests and the differential nature of the items included on the CMT and MAT-6. In addition, these preliminary data provided a benchmark by which the stability of the link could be monitored over time. The stability issue is monitored each year by readministering MAT-6 items during CMT administrations using representative statewide samples. The comparison of these data with prior information provides the information necessary to identify the instructional effects on student performance over time and to update the CMT/MAT-6 link as appropriate. This monitoring and updating ensures the continued accuracy of the normative estimates.

RESEARCH OPTIONS PROGRAM

The Research Options Program is a free service provided by the Connecticut State Department of Education (CSDE) to help educators and educational policymakers gain access to the extensive information available from the Connecticut Mastery Test (CMT). Participation in the Research Options Program is completely voluntary.

The Research Options Program allows educators and educational policymakers (i.e., superintendents, principals, researchers, evaluators and school board members) to benefit from customized research investigations designed to suit their individual needs or questions. Many school districts have taken advantage of the Research Options Program in previous years to successfully address special local concerns.

The Research Options Program provides a number of ways of examining student achievement, as measured by the CMT. For example, one method is to compare aggregated student test scores obtained from the CMT in two or more categories of interest. Categories might include males and females, special program students compared to non-special program students, or any other comparison. These reports include tables that show the proportion of students mastering each objective, average number of objectives mastered and the achievement indicators for students on each component of the test under consideration. These breakdowns allow district personnel to directly compare the performance of specific groups of students. In addition, graphics are provided, as appropriate, with each report. Graphs help simplify the task of interpreting data and convey information in a compact visual format.

The Research Options component of the CMT has grown a great deal since the first study was performed on the Connecticut Basic Skills Proficiency Test almost a decade ago. This year, test directors and evaluators in 28 districts took advantage of this valuable resource to address questions of local interest. In addition, statewide programs such as Bilingual Evaluation, Chapter I and School Effectiveness have used the research options to obtain useful information for participants in over 100 districts. [For more information see Mooney, R.F., 1989, The Connecticut Mastery Test Research Options Program: The Application of State Criterion-Referenced Test Reports for Local Research Needs. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. See also the Research Options Handbook (1988) provided by the Connecticut State Department of Education. (These references are available through the Student Assessment Unit of the Bureau of Evaluation and Student Assessment.)]

TEST ADMINISTRATION AND SCORING

The regular administration of the Connecticut Mastery Test (CMT) for 1990 was conducted using Form D during a three-week period commencing on September 24, 1990. Test sessions were conducted by local school district staff under the supervision of local test coordinators who had been trained by staff of the Connecticut State Department of Education (CSDE) and The Psychological Corporation (TPC). A student who took all subtests participated in approximately six and one-half hours of testing.

The Grade 4 Connecticut Mastery Test had seven testing sessions.

- Mathematics I (60 minutes)
- Mathematics II (60 minutes)
- Writing Sample (45 minutes)
- Degrees of Reading Power (55 minutes)
- Reading Comprehension (60 minutes)
- Listening Comprehension (45 minutes)
- Writing Mechanics/Locating Information (60 minutes)

At the conclusion of the make-up testing period, answer booklets were returned to TPC in San Antonio, Texas for optical scanning and scoring, and then organized in preparation for holistic scoring workshops.

Scoring of the Language Arts and Mathematics Tests

The mathematics and language arts multiple-choice tests were machine-scored by TPC. Mathematics scores were reported for the total test as well as for mastery by each objective. Language arts scores were reported for mastery of each objective only.

Scoring of the Writing Sample

Every writing sample was scored by Connecticut educators using a technique known as the holistic scoring method. Holistic scoring is an impressionistic and quick scoring process that rates written products on the basis of their overall quality. It relies upon the scorers' trained understanding of the general features that determine distinct levels of achievement on a scale appropriate to the group of writing pieces being evaluated. All participants received on-site training and were required to demonstrate a clear understanding of the scoring criteria prior to actually scoring student essays. Each paper receives a final score between 2 and 8, where 2 represents a poor paper and 8 represents a superior paper. A thorough description of the training and scoring process, including sample papers representing different holistic scores, is presented in Appendix E (p. 45).

Analytic Scoring

All papers receiving holistic scores at or below the remedial standard of 4 also received analytic scoring in four categories (traits): focus, organization, support/elaboration and conventions. Analytic scoring is a thorough, trait-by-trait analysis of those components of a writing sample that are considered important to any piece of writing in any context. This scoring procedure can provide a comprehensive picture of a student's writing performance if enough traits are analyzed. It can identify those traits that make a piece of writing effective or ineffective. However, the traits need to be explicit and well defined so that the raters understand and agree upon the basis for making judgments about the writing sample. The analytic rating guide and sample marker papers for the analytic scoring are presented in Appendix F (p. 57).

Scoring of the Degrees of Reading Power (DRP) Test

The DRP multiple-choice test was machine-scored by TPC. The scores reported are in DRP units. These scores identify the difficulty or readability level of prose that a student can comprehend. This makes it possible to match the difficulty of written materials with student ability. These scores can be better interpreted by referring to the readability levels of some general reading materials as shown below:

- Elementary textbooks (grades 3-5) - 35-58 DRP Units
- Fiction Section - children's magazines - 48 DRP Units

A much more extensive list of reading materials is contained and rated in the Readability Report, Seventh Edition, published by The College Board.

The conversion between DRP unit scores and raw scores can be made from the tabled values obtainable through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.

SCHOOL DISTRICT TEST RESULTS REPORTING

The CMT school district reports are designed to provide useful and comprehensive test achievement information about districts, schools and students. Four standard test reports are generated to assist superintendents, principals, teachers, parents and students to understand and use criterion-referenced test results. Appendix G (p. 61) presents samples of the district, school, class and parent/student diagnostic score reports.

FALL 1990 STATEWIDE TEST RESULTS

The Grade 4 Connecticut Mastery Test provides a comprehensive evaluation of student performance on specific skills that Connecticut educators feel are important at the beginning of fourth grade. The mastery test's greatest instructional utility lies in its identification of areas of student weakness and strength. These results profile the statewide results. Each school district also receives a full complement of reports that identify patterns of academic strength and weakness at the district, school, classroom and individual student levels.

Chart 1 (p. 12) gives a statewide summary of the average number of objectives mastered (mathematics and language arts), average writing and reading scores, the number of students scored, the number of students scoring at or above the remedial standard (where applicable) and the percent of students scoring at or above the remedial standard (where applicable).

The following are highlights of the 1990 Grade 4 CMT results:

MATHEMATICS

- Fourth graders mastered an average of 21.2 of the 25 objectives tested, up slightly from last year's figure of 20.6.
- A total of 88.3% of the students scored at or above the remedial standard, up slightly from last year's figure of 86.9%.
- A total of 61% of the students scored at or above the mathematics goal, an increase from last year's figure of 54%.

LANGUAGE ARTS

- Fourth graders mastered an average of 6.3 of the 9 objectives tested, representing no change from last year.

WRITING

- Fourth graders averaged 5.1 on a scale of 2 to 8, up slightly from last year's 5.0.
- A total of 87.8% of the students scored at or above the remedial standard, an increase from last year's figure of 85.8%.
- A total of 18% of the students scored at or above the writing goal representing no change from last year's figure of 18%.

READING

- Fourth graders averaged 48 units on the Degrees of Reading Power (DRP) test; up slightly from last year's average of 47 units.
- A total of 72.9% of the students scored at or above the remedial standard, a slight increase from last year's figure of 72.4%.
- A total of 49% of the students scored at or above the reading goal representing no change from last year's figure of 49%.

CHART 1
1990 CONNECTICUT MASTERY TEST RESULTS
GRADE 4 STATEWIDE SUMMARY

SUBJECT	AVERAGE NUMBER OF OBJECTIVES MASTERED	NUMBER OF STUDENTS SCORED	STUDENTS AT OR ABOVE REMEDIAL STANDARD* NUMBER	PERCENT
MATHEMATICS	21.2	34,265	30,258	88.3%
LANGUAGE ARTS	6.3	34,002	———	———
	AVERAGE HOLISTIC SCORE			
WRITING SAMPLE	5.1	33,841	29,720	87.8%
	AVERAGE DRP UNIT SCORE			
READING	48	34,155	24,907	72.9%

* MATHEMATICS REMEDIAL STANDARD = 69 ITEMS CORRECT
WRITING REMEDIAL STANDARD = 4
READING REMEDIAL STANDARD = 41 DRP UNITS

Mathematics

In mathematics, fourth graders mastered an average of 21.2 objectives, or 84.8%, of the 25 objectives tested. While the state's goal is that all students master every objective, an interim standard (22 of 25 objectives mastered) has been established which represents a high level of mathematics achievement. Chart 2 (p. 15) illustrates that, statewide, students demonstrated strength (85% or more students achieving mastery) in the basic conceptual and computational skills and simple applications objectives of addition/subtraction facts with and without regrouping; identifying shapes/angles/sides and objects in arrays; rewriting numbers using expanded notation; reading and interpreting graphs and tables; telling time; determining the value of a set of coins; and identifying number sentences and needed information from problems and solve story problems with addition and subtraction. However, students did not perform as effectively (fewer than 50% of the students achieving mastery) on the objective of rewriting numbers by regrouping. This objective assesses the understanding of place value as well as regrouping for multi-digit computation.

Chart 3 (p. 16) illustrates the percent of students, statewide, achieving mastery on selected numbers of objectives. This chart indicates that the percent of students mastering fewer than 22 objectives has steadily declined from 1985 to 1990. Furthermore, during that same time period, the percent of students mastering at least 22 objectives has dramatically increased from 42% in 1985 to 61% in 1990.

Students getting fewer than 69 questions correct on the 100-question mathematics section (11.7%) were identified as needing further diagnosis and possible remedial instruction.

There continues to be a consistent pattern throughout the mathematics subtests of student strengths in primarily computational skills and easy one-step routine applications. These strengths are offset by an equally clear pattern of student weaknesses on higher order objectives involving more than routine conceptual understanding or simple application of skill. For example, students are consistently strong in their ability to recall number facts and compute with whole numbers. However, there is consistent weakness in working with fractions, making estimates and solving 2-step or non-routine problems.

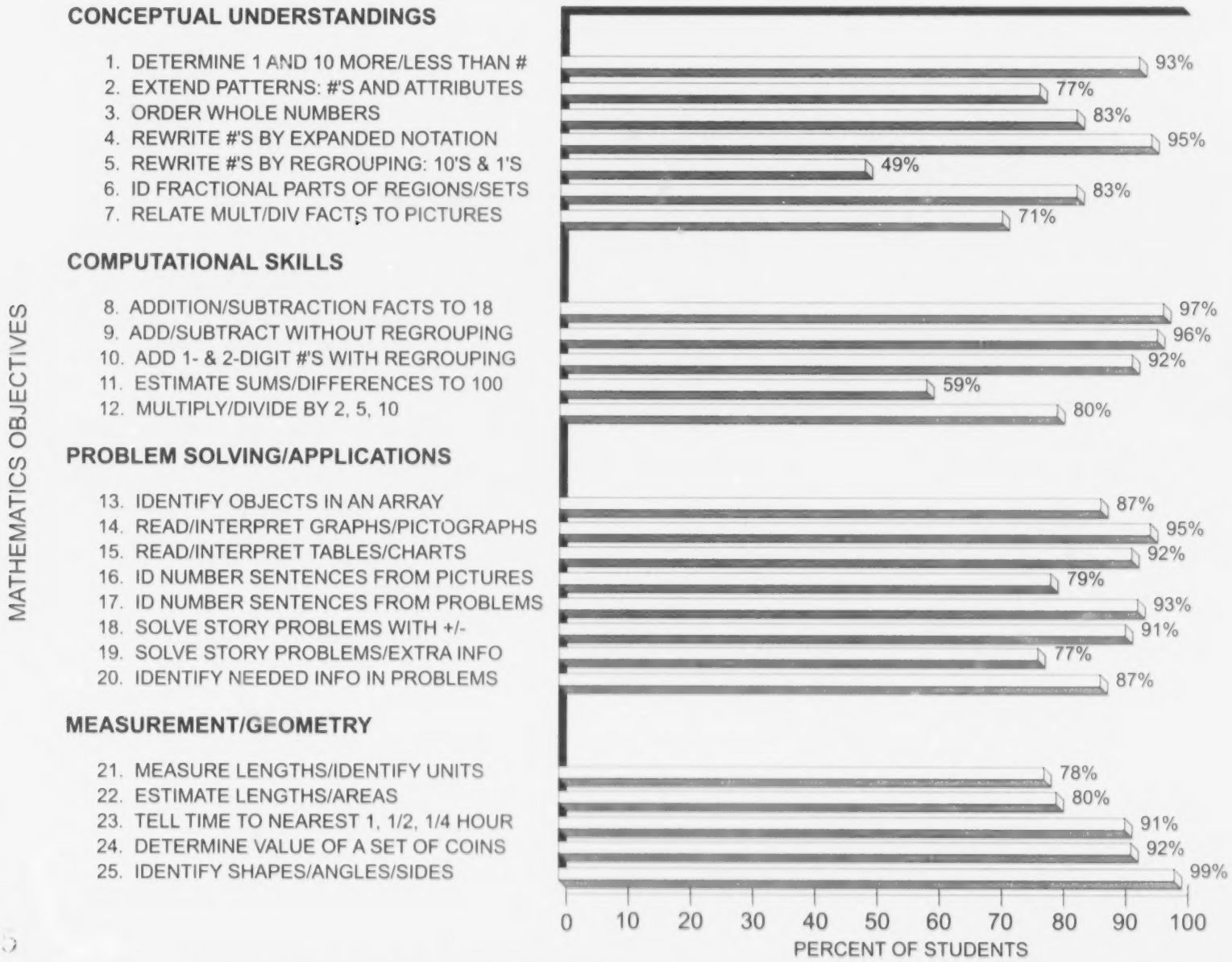
Language Arts

In language arts, fourth grade students averaged 6.3 objectives, or 70.0% of the 9 objectives tested. The state's goal is that all students master every objective. Chart 4 (p. 17) illustrates that students did reasonably well on writing mechanics, as well as locating information and literal reading comprehension. However, weaknesses were found in the higher order inferential and evaluative listening and reading comprehension objectives. These results indicate that students need to learn more effective comprehension strategies while simultaneously being exposed to a wide variety of reading selections.

In writing, fourth grade students averaged 5.1 points on a scale of 2 through 8. The state's goal is that all students be able to produce an organized, well-supported piece of writing, that is, a holistic score of 7 or 8. Chart 5 (p. 18) illustrates that 18% of the students produced an organized, well-supported piece of writing (scores of 7 or 8), and an additional 43% produced a paper which is generally well organized (scores of 5 or 6). A total of 27% of the students scored a 4, which indicates minimally proficient writing, while the remaining 12% scored below the remedial standard (scores of 2 or 3).

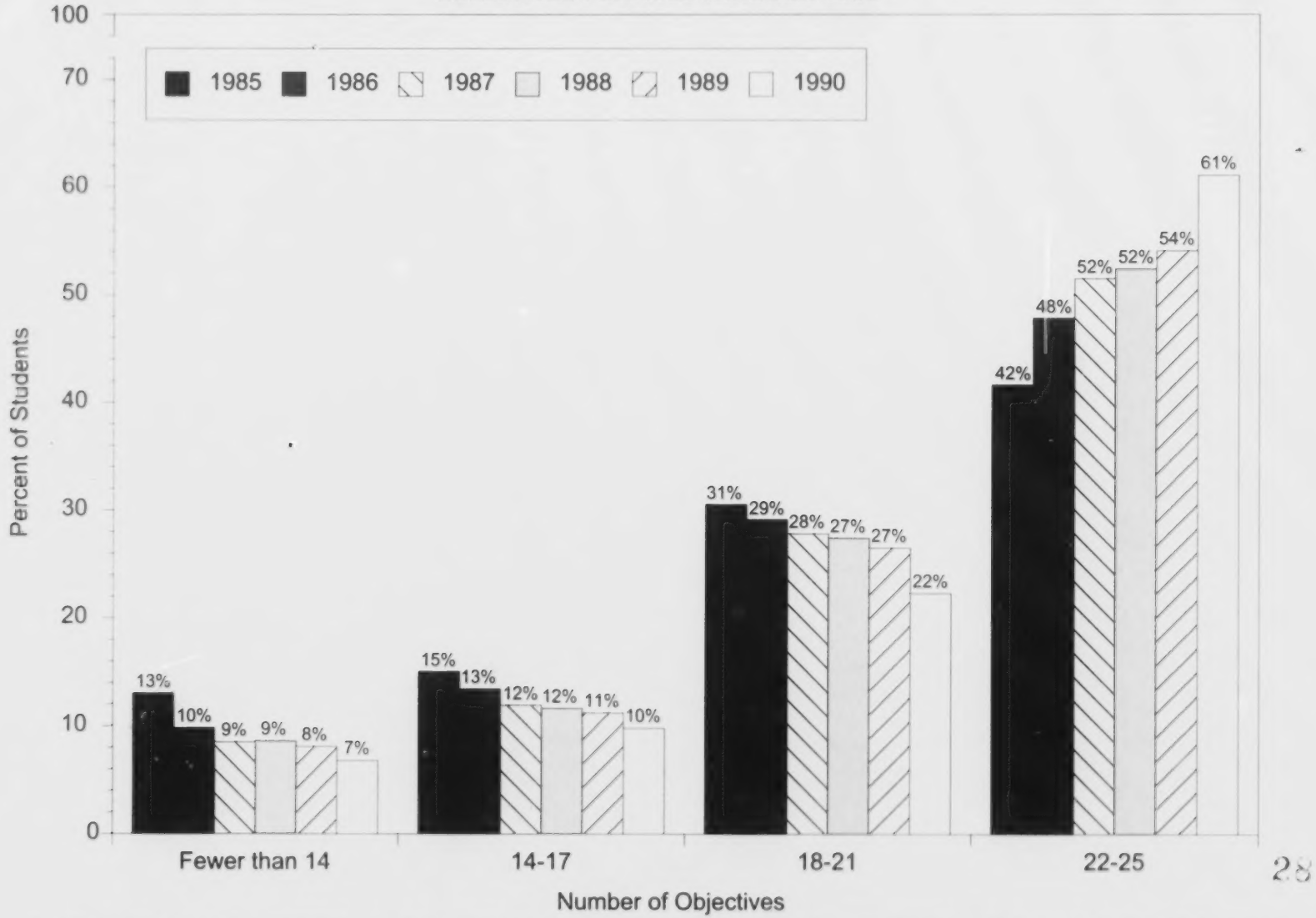
In reading (Degrees of Reading Power test), fourth-grade students average 48 units on a scale of 15 through 99. The state's goal is that all students be able to read with high comprehension those materials typically used at the fourth grade or above; that is, at least 50 on the DRP unit scale. Chart 6 (p. 19) illustrates that 49% of the students scored at least 50 on the DRP score scale, 24% scored between 41 and 49 and 27% scored below the remedial standard of 41. The average score of 48 suggests that Connecticut fourth graders typically can read and comprehend expository materials normally used up to grade four. These results indicate that students may need to be exposed to more nonfiction materials in the primary grades with an emphasis on helping them learn to read and organize the information from these materials.

CHART 2
MATHEMATICS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



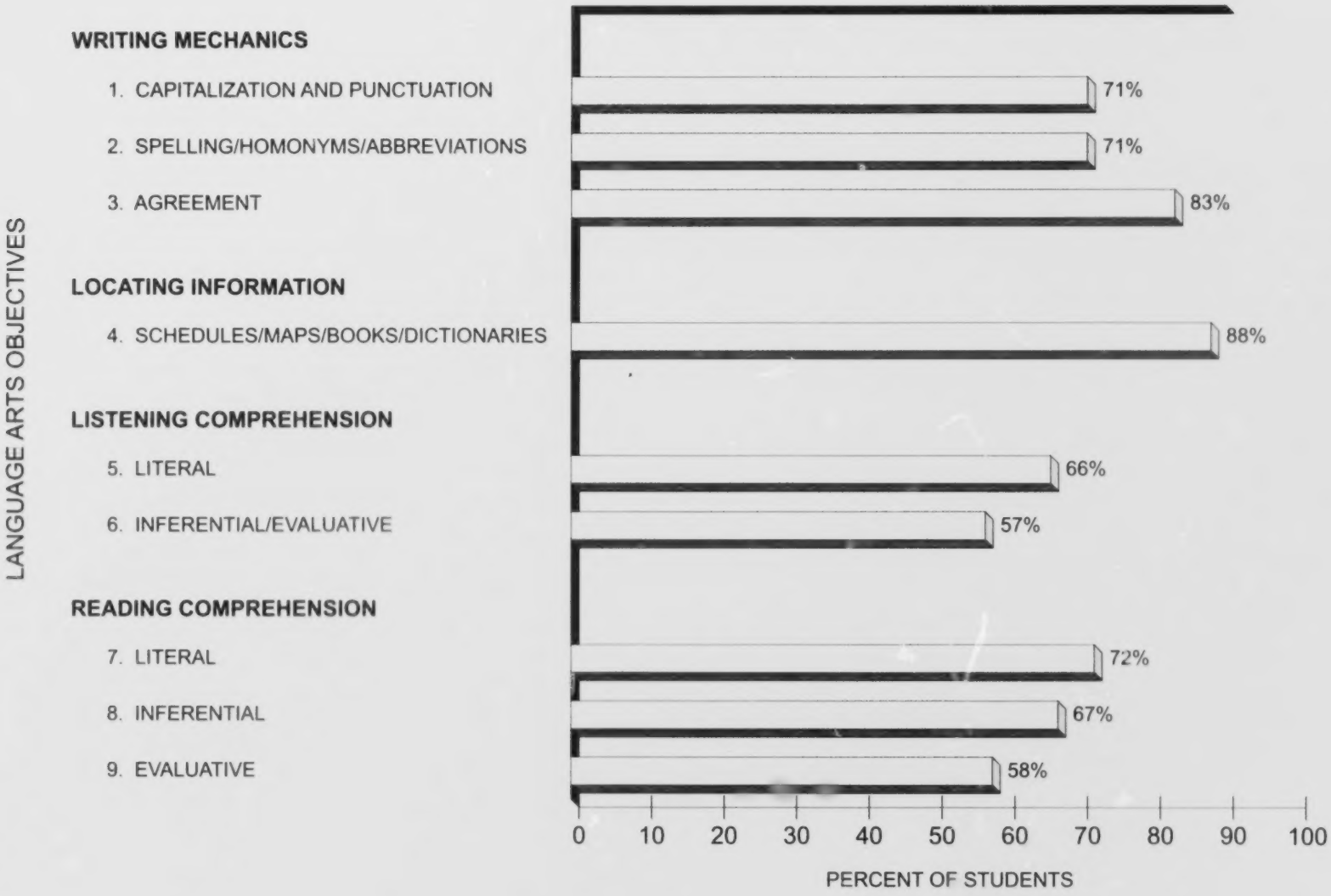
This bar chart illustrates the percent of students, statewide, who mastered each of the 25 mathematics objectives.

CHART 3
MATHEMATICS: COMPARISON OF PERCENT OF STUDENTS ACHIEVING MASTERY ON SELECTED NUMBERS OF OBJECTIVES FOR 1985 THROUGH 1990



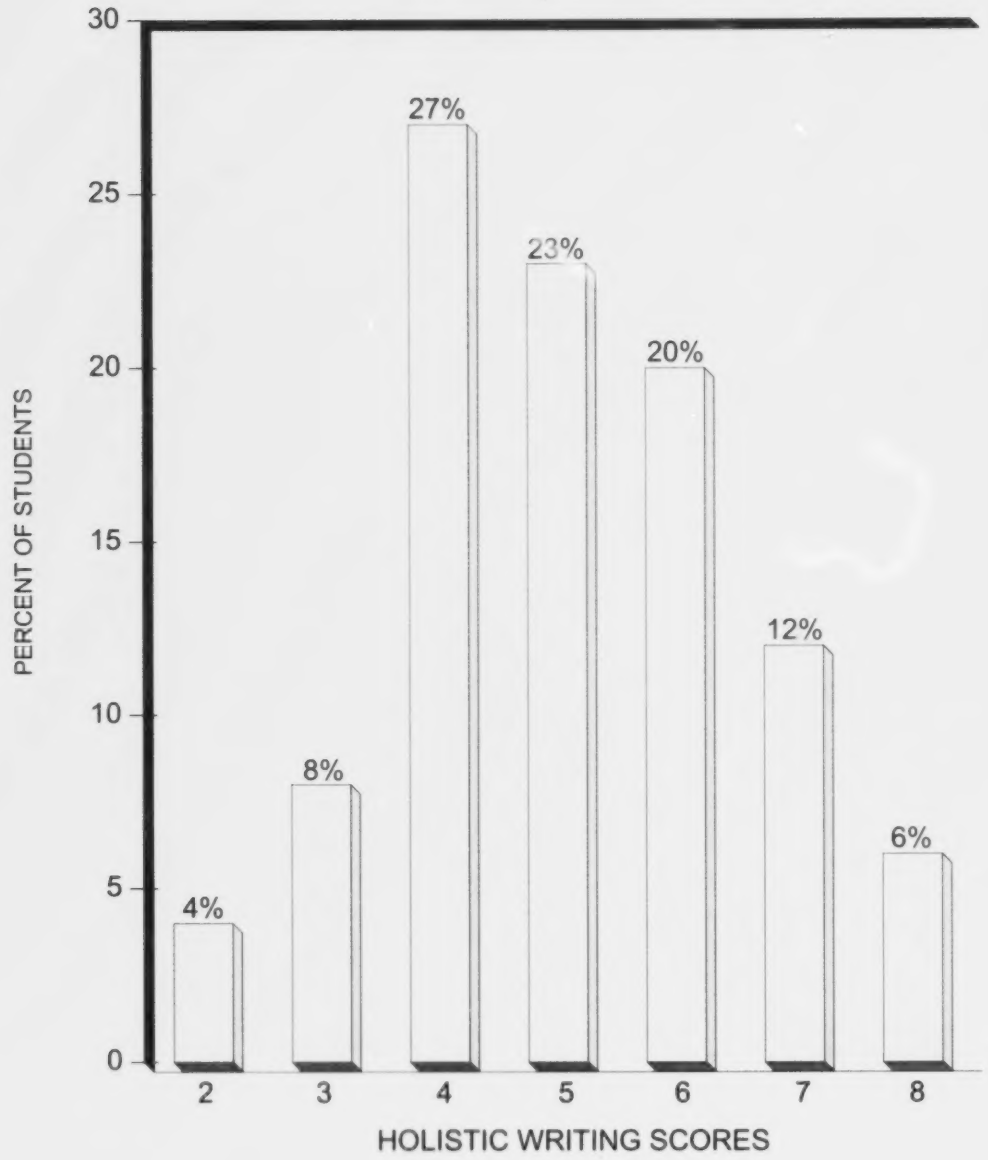
This bar chart illustrates the percent of students, statewide, whose total numbers of objectives mastered fell within one of the indicated ranges.

CHART 4
LANGUAGE ARTS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



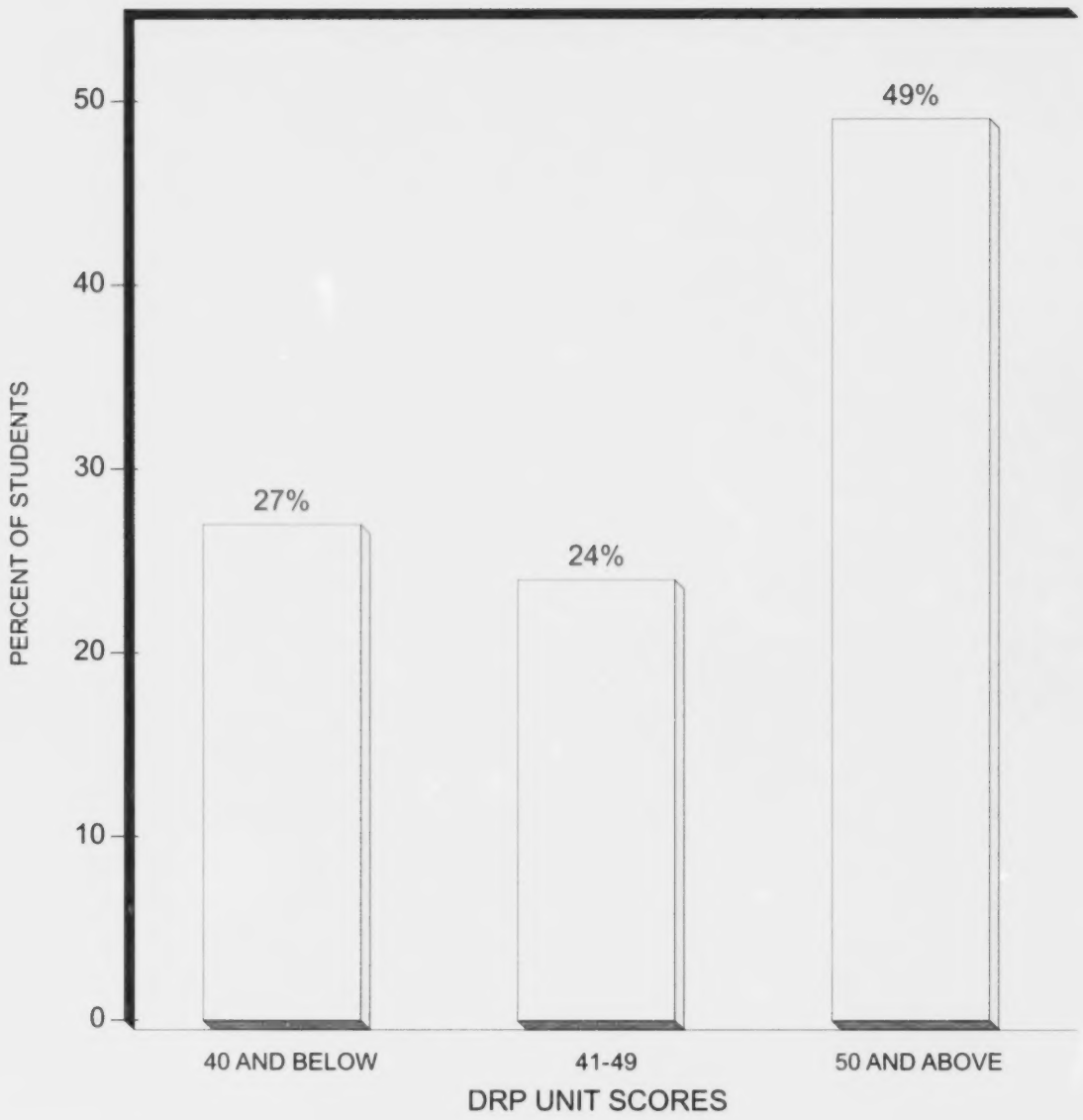
This bar chart illustrates the percent of students, statewide, who mastered each of the nine language arts objectives.

CHART 5
WRITING SAMPLE:
PERCENT OF STUDENTS AT EACH SCORE POINT



This bar chart illustrates the distribution of students who received each *holistic writing* score, statewide. Holistic writing scores are interpreted as follows: a student who scores 7 or 8 has produced a paper which is well written with developed supportive detail; a student who scores 5 or 6 has produced a paper which is generally well organized with supportive detail; a student who scores 4 is minimally proficient; and a student who scores 2 or 3 is in need of further diagnosis and possible remedial assistance.

CHART 6
DEGREES OF READING POWER® (DRP)®:
PERCENT OF STUDENTS AT SELECTED RANGES OF DRP UNIT SCORES



This bar chart illustrates the distribution of students, statewide, scoring in each of three *Degrees of Reading Power* (DRP) score categories. DRP score categories are interpreted as follows: a student who scores 50 DRP units or above has met the statewide Reading Goal and can read, with high comprehension, materials which are typically used at grade 4 or above; a student who scores 41-49 DRP units can read, with high comprehension, materials which are typically used below grade 4 but above the Remedial Standard; and a student who scores 40 DRP units or below is in need of further diagnosis and possible remedial assistance.

COMPARISON OF 1985 THROUGH 1990 TEST RESULTS

Charts 7-12 (pp. 21-26) address the comparison of the 1985 through 1990 test results. Charts 7 (p. 21), 10 (p. 24) and 11 (p. 25) present a comparison of statewide average scores on the four subtests, a comparison of students scoring at or above the remedial standard and a comparison of the percent of students scoring at or above the statewide goals, respectively. The remaining three charts provide a comparison of the percent of students achieving mastery in each mathematics objective (Chart 8, p. 22) and each language arts objective (Chart 9, p. 23) and a comparison of student achievement in relation to the remedial standards (Chart 12, p. 26).

Chart 7 (p. 21) shows that the statewide average scores increased in all areas tested when 1990 results are compared to 1985 results. In mathematics, the average number of objectives mastered increased from 19.3 in the initial assessment in 1985 to 21.2 in 1990. Mathematics scores have increased slightly in each of the test administrations indicating a steady positive trend. DRP reading performance has also been moving slowly in a positive direction. While the average DRP score was unchanged from 1988 to 1989, there has been a one point increase in each other year moving from 43 in 1985 to 48 in 1990. The average number of language arts objectives mastered has increased slightly over the life of the CMT program from 6.1 objectives mastered in 1985 to 6.3 mastered in 1990. Student performance on the writing samples showed some progress from 1985 to 1990 with the average holistic score increasing from 4.8 to 5.1.

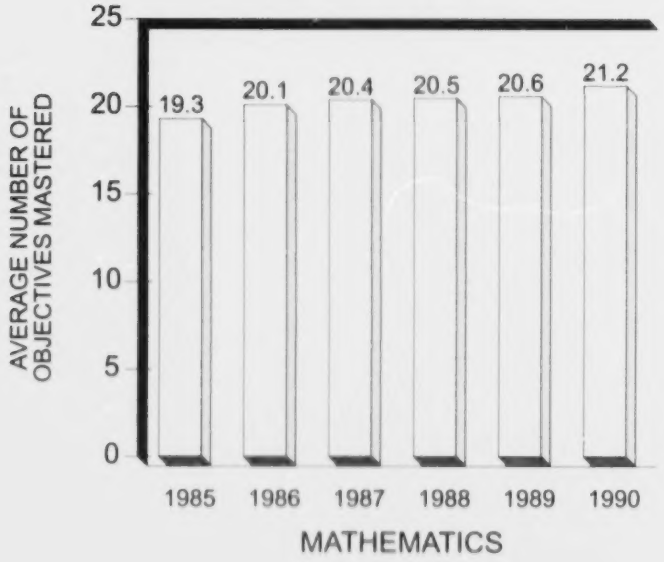
Chart 8 (p. 22) lists the percent of students at mastery for each of the 25 mathematics objectives. From 1985 to 1990, 24 objectives have shown a gain in percent of students at or above mastery and 1 has slightly declined. A comparison of the 1990 and 1985 results shows large gains (at least 10 percentage points) in the percent of students meeting the mastery standard in the following objectives: rewriting numbers by regrouping; identifying fractional parts; relating multiplication/division facts to pictures; estimating sums and differences; reading and interpreting tables/charts; identifying number sentences from pictures; and estimating lengths and areas.

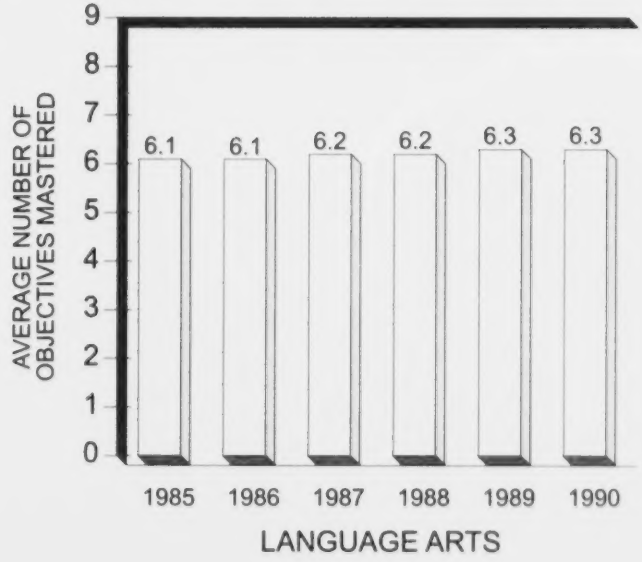
Chart 9 (p. 23) lists the percent of students at mastery for each of the 9 language arts objectives. From 1985 to 1990, 6 objectives have shown a gain in percent of students at or above mastery and 3 objectives have declined.

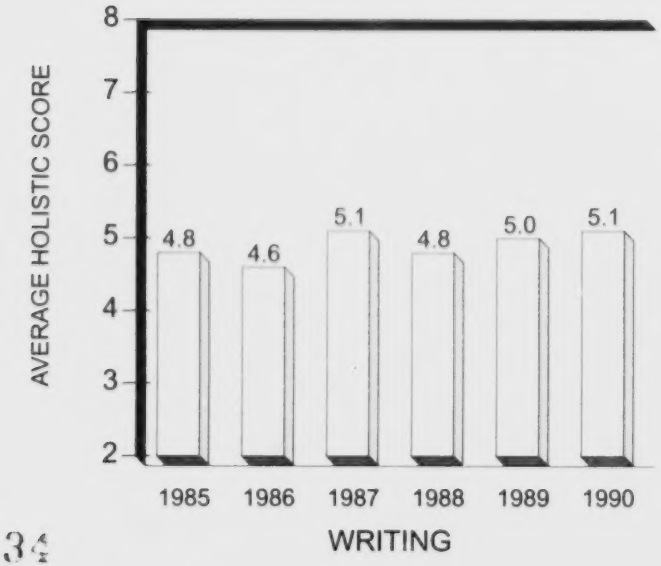
When 1990 results are compared with 1985, inferential reading comprehension showed the most improvement in the percent of students at mastery with a 16 percentage point gain.

Chart 10 (p. 24) compares the percent of students who scored at or above the remedial standard in mathematics, writing and reading (DRP) for 1985 through 1990. In each content area there has been a gain in the percent of students meeting the remedial standard over the six CMT administrations. In mathematics, the remedial standard is 69 out of 100 items correct. There was an 8 percentage point increase in performance at or above the remedial standard from 1985 (80%) to 1990 (88%). In writing, the remedial standard is four on a scale from 2 to 8. The percent of students scoring at or above the remedial standard increased from 81% in 1985 to 88% in 1990. In reading (DRP) the remedial standard is 41 DRP units with 70% comprehension. There was a 5 percentage point increase in performance at or above the remedial standard from 1985 (68%) to 1990 (73%).

CHART 7
COMPARISON OF STATEWIDE AVERAGE SCORES FOR 1985 THROUGH 1990







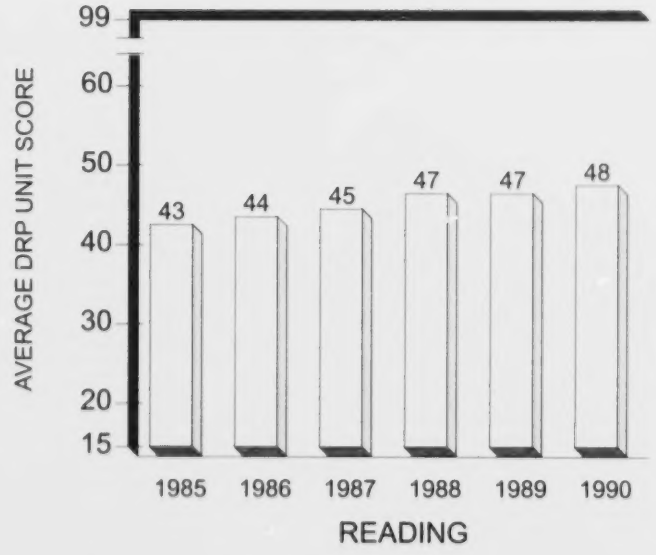


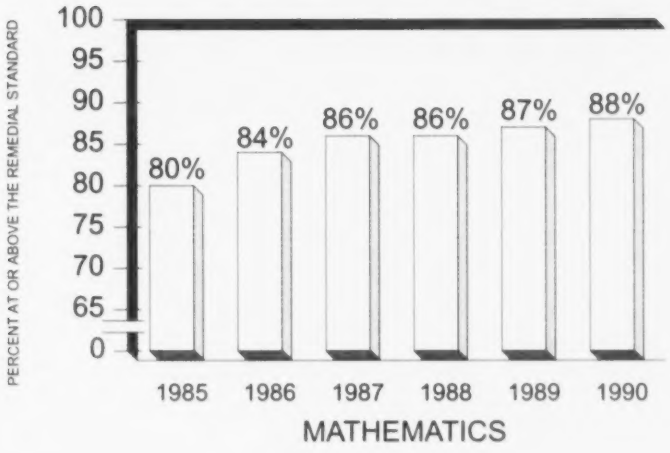
CHART 8
MATHEMATICS: COMPARISON OF THE PERCENT OF STUDENTS ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1985 THROUGH 1990

OBJECTIVE	PERCENT OF STUDENTS STUDENTS AT MASTERY						PERCENTAGE POINT GAIN FROM 1985 TO 1990
	1985	1986	1987	1988	1989	1990	
CONCEPTUAL UNDERSTANDINGS							
1. DETERMINE 1 AND 10 MORE/LESS THAN #	91%	92%	93%	91%	91%	93%	2%
2. EXTEND PATTERNS: #'S AND ATTRIBUTES	72%	75%	78%	69%	71%	77%	5%
3. ORDER WHOLE NUMBERS	78%	82%	84%	83%	83%	83%	5%
4. REWRITE #'S BY EXPANDED NOTATION	96%	96%	96%	96%	96%	95%	-1%
5. REWRITE #'S BY REGROUPING: 10'S & 1'S	35%	39%	41%	45%	48%	49%	14%
6. ID FRACTIONAL PARTS OF REGIONS/SETS	73%	85%	86%	90%	90%	83%	10%
7. RELATE MULT/DIV FACTS TO PICTURES	54%	61%	62%	59%	60%	71%	17%
COMPUTATIONAL SKILLS							
8. ADDITION/SUBTRACTION FACTS TO 18	91%	97%	97%	98%	98%	97%	6%
9. ADD/SUBTRACT WITHOUT REGROUPING	95%	96%	97%	97%	97%	96%	1%
10. ADD 1- & 2-DIGIT #'S WITH REGROUPING	89%	87%	88%	84%	85%	92%	3%
11. ESTIMATE SUMS/DIFFERENCES TO 100	28%	46%	52%	49%	51%	59%	31%
12. MULTIPLY/DIVIDE BY 2, 5, 10	79%	80%	81%	78%	78%	80%	1%
PROBLEM SOLVING/APPLICATION							
13. IDENTIFY OBJECTS/NUMBERS IN AN ARRAY	82%	87%	88%	89%	90%	87%	5%
14. READ/INTERPRET GRAPHS/PICTOGRAPHS	89%	90%	91%	92%	93%	95%	6%
15. READ/INTERPRET TABLES/CHARTS	78%	84%	86%	90%	91%	92%	14%
16. ID NUMBER SENTENCES FROM PICTURES	57%	58%	60%	60%	62%	79%	22%
17. ID NUMBER SENTENCES FROM PROBLEMS	91%	91%	92%	93%	93%	93%	2%
18. SOLVE STORY PROBLEMS WITH +/-	83%	76%	78%	85%	85%	91%	8%
19. SOLVE STORY PROBS WITH EXTRA INFO	73%	63%	65%	78%	79%	77%	4%
20. IDENTIFY NEEDED INFO IN PROBLEMS	79%	82%	83%	83%	83%	87%	8%
MEASUREMENT/GEOMETRY							
21. MEASURE LENGTHS/IDENTIFY UNITS	76%	79%	81%	82%	83%	78%	2%
22. ESTIMATE LENGTHS/AREAS	70%	79%	81%	72%	72%	80%	10%
23. TELL TIME TO NEAREST 1, 1/2, 1/4 HOUR	86%	90%	91%	94%	95%	91%	5%
24. DETERMINE VALUE OF A SET OF COINS	91%	93%	94%	92%	92%	92%	1%
25. IDENTIFY SHAPES/ANGLES/SIDES	97%	97%	97%	97%	97%	99%	2%

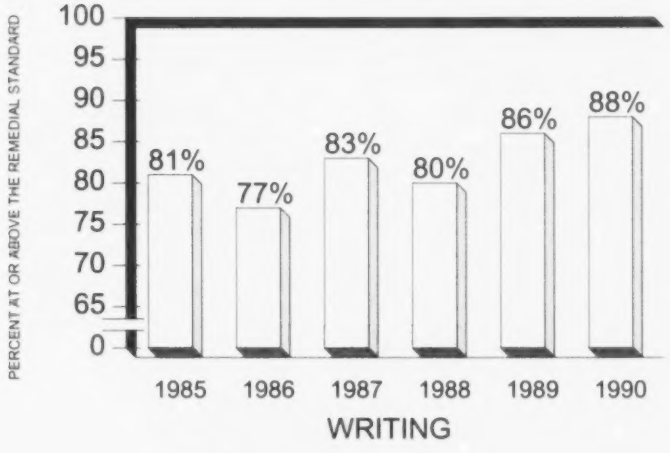
CHART 9
LANGUAGE ARTS: COMPARISON OF THE PERCENT OF STUDENTS ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1985 THROUGH 1990

OBJECTIVE	PERCENT OF STUDENTS AT MASTERY						PERCENTAGE POINT GAIN FROM 1985 TO 1990
	1985	1986	1987	1988	1989	1990	
WRITING MECHANICS							
1. CAPITALIZATION AND PUNCTUATION	74%	83%	85%	70%	72%	71%	-3%
2. SPELLING/HOMONYMS/ABBREVIATIONS	66%	62%	62%	68%	67%	71%	5%
3. AGREEMENT	80%	81%	82%	84%	84%	83%	3%
LOCATING INFORMATION							
4. SCHEDULES/MAPS/BOOKS/DICTIONARIES	81%	85%	87%	88%	89%	88%	7%
LISTENING COMPREHENSION							
5. LITERAL	73%	54%	55%	68%	68%	66%	-7%
6. INFERENTIAL/EVALUATIVE	60%	64%	66%	74%	74%	57%	-3%
READING COMPREHENSION							
7. LITERAL	67%	71%	73%	65%	66%	72%	5%
8. INFERENTIAL	51%	58%	60%	52%	53%	67%	16%
9. EVALUATIVE	55%	52%	54%	51%	52%	58%	3%

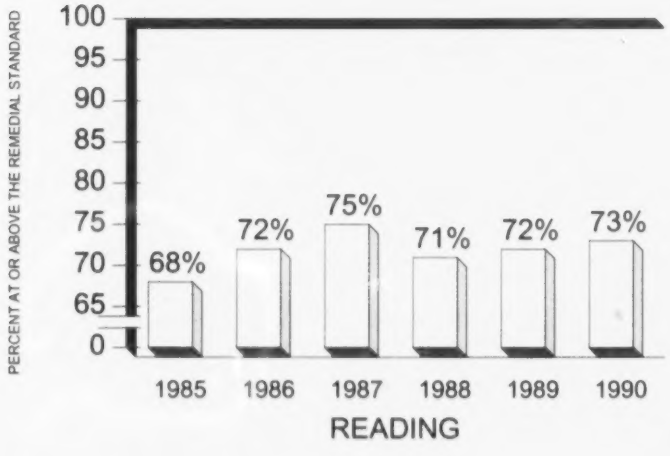
CHART 10
COMPARISON OF THE PERCENT OF STUDENTS SCORING AT OR ABOVE THE REMEDIAL STANDARD IN EACH SUBJECT AREA FOR 1985 THROUGH 1990



MATHEMATICS GROWTH SINCE 1985 8%

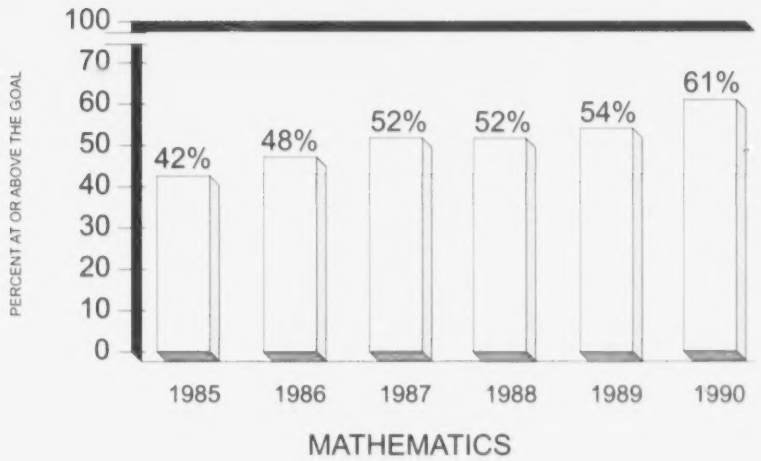


WRITING GROWTH SINCE 1985 7%



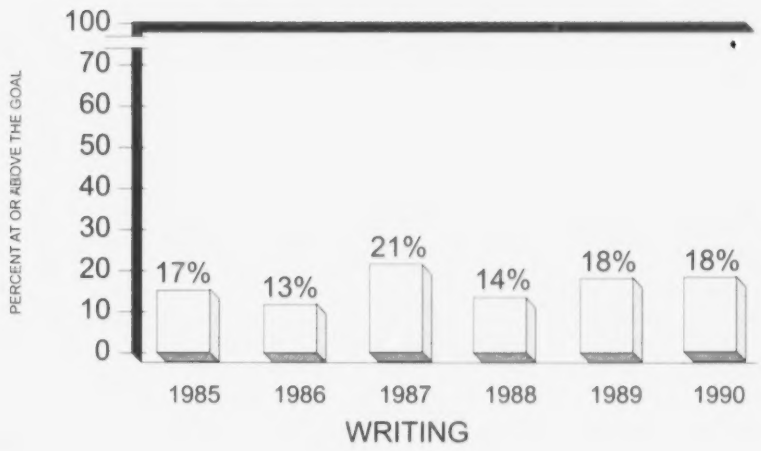
READING GROWTH SINCE 1985 5%

CHART 11
COMPARISON OF THE PERCENT OF STUDENTS SCORING AT OR ABOVE THE GOAL IN EACH SUBJECT AREA FOR 1985 THROUGH 1990



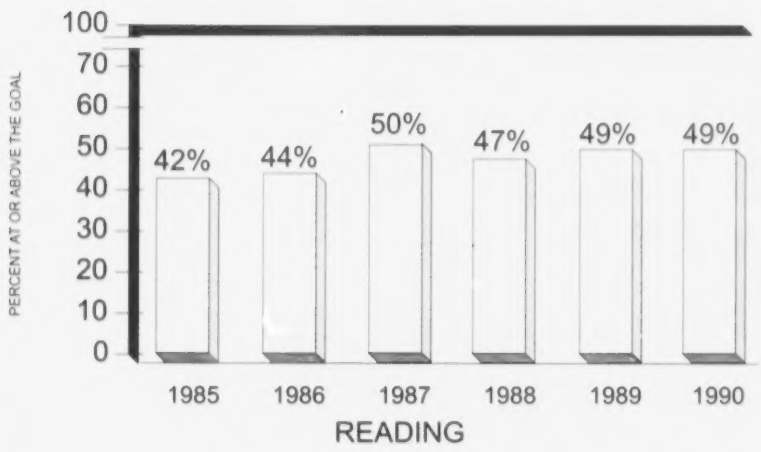
MATHEMATICS GROWTH SINCE 1985 19%

MATHEMATICS GOAL IS 22 OF 25 OBJECTIVES MASTERED



WRITING GROWTH SINCE 1985 1%

WRITING GOAL IS 7 ON A SCALE OF 2 TO 8



READING GROWTH SINCE 1985 7%

READING GOAL IS 50 DRP UNITS WITH 70% COMPREHENSION

CHART 12
COMPARISON OF STUDENT ACHIEVEMENT IN RELATION TO THE REMEDIAL STANDARDS
1985 THROUGH 1990 ADMINISTRATIONS

	1985		1986		1987		1988		1989		1990	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS AT OR ABOVE THE STANDARD:												
ON ALL THREE TESTS	17,499	58.6	18,311	59.8	19,840	63.9	19,387	60.4	21,420	64.9	22,788	66.2
ON TWO OF THE TESTS	5,647	18.9	6,109	19.9	5,997	19.3	6,590	20.5	6,259	19.0	6,571	19.1
ON ONE OF THE TESTS	3,913	13.1	3,617	11.8	3,341	10.8	3,883	12.1	3,348	10.1	3,379	9.8
ON NONE OF THE TESTS	2,822	9.4	2,588	8.5	1,867	6.0	2,259	7.0	1,975	6.0	1,666	4.8
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS BELOW THE STANDARD:												
ON ALL THREE TESTS	2,459	8.2	2,265	7.4	1,643	5.3	1,804	5.6	1,665	5.0	1,376	4.0
ON TWO OF THE TESTS	3,943	13.2	3,671	12.0	3,284	10.6	3,993	12.4	3,404	10.3	3,346	9.7
ON ONE OF THE TESTS	5,664	19.0	6,113	20.0	5,729	18.5	6,647	20.7	6,204	18.8	6,556	19.1
ON NONE OF THE TESTS	17,815	59.6	18,576	60.7	20,389	65.7	19,675	61.3	21,829	66.1	23,126	67.2
NUMBER OF STUDENTS TESTED	29,881		30,625		31,045		32,119		33,002		34,404	
NUMBER OF STUDENTS BELOW REMEDIAL STANDARD ON ONE OR MORE SUBTESTS (UNDUPLICATED COUNT)	12,066	40.4	12,049	39.3	10,656	34.3	12,444	38.7	11,273	34.2	11,278	32.8

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Chart 11 (p. 25) compares the percent of students scoring at or above the statewide goals in mathematics, writing and reading from 1985 through 1990. There has been at least a slight gain in the percent of students reaching the statewide goal in each of the three content areas over the six CMT administrations. In mathematics, the goal is 22 of 25 objectives mastered. There was a 19 percentage point increase in performance at or above the statewide goal from 1985 (42%) to 1990 (61%). In writing, the goal is 7 on a scale of 2 to 8. The percent of students scoring at or above the statewide standard increased slightly from 17% in 1985 to 18% in 1990. In reading (DRP) the statewide goal is 50 DRP units with 70% comprehension. There was a 7 percentage point increase in performance at or above the goal from 1985 (42%) to 1990 (49%).

Chart 12 (p. 26) is a comparison of student achievement in relation to the remedial standards for 1985 through 1990. Over the six-year period, the percent of students at or above the remedial standard on all three tests (mathematics, reading, writing) has increased from 58.6% in 1985 to 66.2% in 1990, while the percent of students below the remedial standard on all three tests has declined from 8.2% in 1985 to 4.0% in 1990. The percent of students below the remedial standard on one or more subtests has also dropped from 40.4% in 1985 to 32.8% in 1990.

Test Results by District

Appendices H, I and J address the comparison of test results by school district. Appendix H (p. 73) and Appendix I (p. 81) present a listing of the mathematics and language arts test results, respectively, for each Connecticut school district. Appendix J (p. 89) is a listing of the percent of students meeting the statewide goals in reading (DRP), writing and mathematics for each school district. In each appendix, school districts are listed alphabetically, followed by regional school districts. The Type of Community (TOC) designation in the second column and the Education Reference Group (ERG) designation in the third column indicate the TOC and ERG groups with which each district or school has been classified. Definitions of the TOC and ERG classifications are provided in Appendix K (p. 95) and Appendix L (p. 97), respectively. TOC and ERG summaries follow the alphabetical listings of school district results in mathematics, language arts and percent meeting the statewide goal in each content area.

The State Department of Education advises against comparing scores between and among school districts. It is more meaningful to compare district results longitudinally within each district. It is also not appropriate or meaningful to sum across the different tests and subtests for comparative purposes because of differences in test length, mastery criteria and remedial standards. These comparisons are inappropriate because it is impossible to identify, solely on the basis of this information, how the average student has performed in the districts being compared. Average scores and standard deviations provide more appropriate comparative information on how well the average student is performing, although many factors may affect the comparability of these statistics as well.

Normative Results

Normative information is provided to indicate how well the average student in Connecticut performs compared to a national sample of students. Norms have been available for the mathematics test, the language arts test and the reading comprehension test since 1987. These norms are based on links established between the CMT and the sixth edition of the Metropolitan Achievement Test (MAT-6). The norms are expressed in percentile ranks which provide estimates of group performance relative to the performance of the national MAT-6 norm group. Percentile ranks range from 1 to 99. A percentile rank of 50 represents the score that divides the norm group into two equal parts; half scoring below and half scoring above this value. Each reported percentile rank represents the performance of a nationally representative sample of students in relation to Connecticut student performance.

The following are the estimated norms for the grade four statewide averages. In the content areas of mathematics, language arts and reading comprehension (not DRP), data are provided for the 1987 through 1990 administrations.

Grade Four

	1987	1988	1989	1990
Mathematics	67	66	67	68
Language Arts	69	70	69	67
Reading Comprehension	60	58	59	58

Patterns in the data are summarized below.

- In each content area and administration year, the mean national percentile rankings of Connecticut students substantially exceed the national average (50th percentile rank).
- The norms for mathematics and language arts have remained similar to one another over the four years with percentile ranks ranging from 66 to 70 in value. In 1990 the reading comprehension performance continues to be lower than either mathematics or language arts when compared to a national sample.
- The percentile ranks within each content area are quite stable across the four years, differing in value by no more than three points.

It should be pointed out that these norms provide a way to interpret the performance of the average Connecticut student relative to a national sample. They do not address the issue of how Connecticut, as a state, compares to other states. The fact that, in 1990, the average Connecticut student is at the 68th percentile in mathematics does not mean that the state as a whole would be in the 68th percentile if it were compared to other states. A state-by-state achievement testing program has been endorsed by the Council of Chief State School Officers (CCSSO) and the National Governors' Association (NGA) and is in progress using the National Assessment of Educational Progress (NAEP) Program. Connecticut participated in the 1990 trial state assessment for mathematics at grade eight. Results of this assessment are scheduled for release June 6, 1991 at a national press conference in Washington, D.C. Connecticut intends to participate in the 1992 trial state assessment in grades four and eight.

Norms Available to Districts

Mathematics, language arts and reading comprehension norms can also be calculated for groups of students at the district level. Each year all districts are notified by the CMT contractor that norms for their own districts and schools within their districts are optionally available. In addition, districts are offered all materials and directions necessary to hand-calculate norms for groups of students within their districts (e.g., Chapter I students). There is no charge for either of these services. Any district that requests this information receives it directly from the CMT contractor. No district receives normative information unless it is specifically requested by the superintendent. Over one half of Connecticut school districts has requested norms in the past.

Participation Rate Results

Appendix M (p. 101) presents the number of fourth-grade students in each district and the percents of students who participated in the grade four mastery testing during the fall 1990 statewide administration. Appendix M also shows the percent of students exempted from CMT testing. The alphabetical listing of districts provides the following information for each district:

Column 1 The name of the district
Column 2 The total fourth-grade population at the start of mastery testing
Column 3 The number of students eligible for testing
Column 4 The percent of total population exempted from testing
Columns 5-8 The percent of eligible students tested in each content area

The results in Appendix M illustrate that participation rates by school district on the fourth-grade CMT were quite high, with only a few exceptions. However, the high percentage of students exempted from the CMT, statewide, combined with the large variation in exemption rates among districts, has raised concerns about the fair application of exemption procedures and its impact on students. The Department is currently examining the impact of the exclusion provisions on the CMT programs for Special Education and Bilingual students. It is anticipated that the results from these analyses will be available in the spring of 1991.

APPENDIX A

Test Construction

Test Construction

The development of the fourth-grade criterion-referenced mastery test required the formation of seven statewide advisory committees. These included the Mathematics and Language Arts Advisory Committees, the Psychometrics Advisory Committee, the Bias Advisory Committee, the Mastery Test Implementation Advisory Committee and two standard-setting committees, one for mathematics and one for language arts. These committees were comprised of representatives from throughout the state. Members were selected for their area of expertise. Approximately 150 Connecticut educators participated on the mastery test committees which met over 80 times during the first 18 months of test development. (See Acknowledgements, p. v and page 44.)

Beginning in the spring of 1984, content committees in both language arts and mathematics participated in each stage of the test development process, including assisting the State Department of Education in the selection of The Psychological Corporation as its test contractor. First, the content committees reviewed the curriculum materials prevalent throughout the state and the scope of the national tests in use in Connecticut at the respective grade levels. Additional resources included the Connecticut curriculum guides in mathematics and language arts, developed in 1981, as well as the results of recent Connecticut Assessment of Educational Progress (CAEP) assessments in mathematics and language arts. Next, the committees identified sets of preliminary mathematics and language arts objectives which reflected existing curriculum materials and the goals of the mastery testing program. The content committees defined an objective as an operationalized learning outcome that was fairly narrow and clearly defined.

Four criteria were used in identifying the appropriate learning outcomes or test objectives and in selecting specific test items to be included on the Grade 4 Connecticut Mastery Test (CMT). To have been considered for use, test objectives and items must have been:

(1) significant and important;
(2) developmentally appropriate;
(3) reasonable for most students to achieve; and
(4) generally representative of what is taught in Connecticut schools.

Once the objectives were identified, item specifications and/or sample items were written. Item specifications are written descriptions of the types and forms of test items that assess an objective. They also prescribe the types of answer choices that can be used with each item.

After the test specifications were written and agreed upon, the test contractor wrote items and response choices for each of the objectives. The items were then reviewed by the content committees. Items which met the criteria of the test specifications and received the approval of the content committees were considered for the pilot test. Before testing, the Bias Advisory Committee reviewed each item for potential discrimination related to gender, race or ethnicity in the language or format of the question or response choices. Page v lists the original members of the Bias Advisory Committee although some membership changes have occurred since piloting. After their review was completed, the pilot test forms were constructed. Over 500 customized Connecticut items were included in the October 1984 grade four pilot test in language arts and mathematics.

The Psychometrics Advisory Committee provided advice concerning other aspects of the pilot test including the sampling design, statistical bias analysis, the design of item specifications and pilot test administration procedures. The recommendations proposed by the Psychometrics Advisory Committee were reviewed and endorsed by the Mastery Test Implementation Advisory Committee.

Pilot Tests

After the items had been reviewed, twelve test forms (six in mathematics and six in language arts) were piloted for the grade four test. The purpose of several pilot test forms was to ensure that enough test items were included to construct three comparable test forms from the pilot test results.

Over 6,000 grade four students participated in the October 1984 pilot test. In January 1985, the pilot test results were made available to Connecticut State Department of Education (CSDE) staff. The process of selecting items to construct three comparable test forms began by the Bias Advisory Committee examining the pilot test statistics of each item for potential bias. As a result, some items were eliminated from the item pool. From the remaining items, test forms were constructed to be equivalent in content and difficulty at both the objective and total test levels.

Once the items were sorted on this basis, the test contractor prepared three complete forms of the mathematics test and two complete forms of the language arts test. These forms were approved by the content committees. Each form was created to be equal in difficulty and test length. A third language arts test was constructed after a few additional items were piloted as part of a later test administration. The psychometric procedures used to construct these test forms focus primarily on the use of the one-parameter item response model.

Survey

In October 1984, a survey of preliminary grade four mastery test objectives was sent to over 3,000 Connecticut educators. The purpose of the survey was to determine (1) the importance of the proposed mathematics and reading/language arts objectives and (2) whether the objectives were taught prior to the beginning of grade four. Over a 50% response rate was achieved which included approximately one-third of the respondents representing urban school districts. As a result of the survey, two objectives were not considered to be important learning outcomes before fourth grade and consequently were eliminated from the fourth-grade language arts test by the Language Arts Advisory Committee.

APPENDIX B

Grade Four Mathematics Objectives

Grade Four Mathematics Objectives

The 25 objectives of the fourth-grade mathematics test are listed below. There are four test items for each objective. The number of items in each domain is indicated in the parentheses.

CONCEPTUAL UNDERSTANDINGS (28)

1. Identify the number one more, one less, ten more or ten less than a given number
2. Extend patterns involving numbers and attributes
3. Order whole numbers
4. Rewrite numbers using expanded notation
5. Rewrite numbers by regrouping tens and ones
6. Identify fractional parts of regions and sets from pictures for halves, thirds, fourths and sixths
7. Relate multiplication and division facts to rectangular arrays

COMPUTATIONAL SKILLS (20)

8. Know addition and subtraction facts to 18
9. Add and subtract one- and two-digit numbers without regrouping
10. Add one- and two-digit numbers with regrouping
11. Estimate sums and differences to 100
12. Multiply and divide by 2, 5 and 10

PROBLEM SOLVING/APPLICATIONS (32)

13. Identify objects or numbers that do or do not belong in a collection, matrix, or array
14. Read and interpret bar graphs and pictographs
15. Read and interpret data from tables and charts
16. Identify or write number sentences from pictures
17. Identify number sentences from addition or subtraction story problems
18. Solve simple story problems involving addition or subtraction
19. Solve and identify number sentences in simple story problems involving addition and subtraction, with extraneous information
20. Identify needed information in problem situations

MEASUREMENT/GEOMETRY (20)

21. Measure length and identify appropriate units for measuring length and distance
22. Estimate lengths and areas
23. Tell time to the nearest hour, half hour and quarter hour, using analog and digital clocks
24. Determine the value of a set of coins
25. Identify shapes, angles and sides

Performance on all 25 objectives is reported at the student, classroom, school, district and state levels.

APPENDIX C

Grade Four Language Arts Objectives

Grade Four Language Arts Objectives

There are nine multiple-choice objectives and two holistic measures, one for reading and one for writing, within the fourth-grade language arts test. The number of items for each content area or objective is indicated in the parentheses.

WRITING MECHANICS (36)

1. Capitalization and Punctuation (12)
2. Spelling Words, Homonyms and Abbreviations (9)
3. Agreement (15)

LOCATING INFORMATION (11)

4. Schedules, Maps, Table of Contents, Title Page and Dictionary (11)

LISTENING COMPREHENSION (20)

5. Literal (7)
6. Inferential and Evaluative (13)

READING COMPREHENSION (36)

7. Literal (12)
8. Inferential (14)
9. Evaluative (10)

DEGREES OF READING POWER (56)

WRITING SAMPLE (1)

Holistic scoring is provided for all students. Analytic scoring is provided for students who score at or below the remedial standard of 4 (on a scale of 2-8).

Performance on all nine Language Arts objectives, the Degrees of Reading Power and Writing Sample is reported at the student, classroom, school, district and state levels.

APPENDIX D

Remedial (Grant) Standard-Setting Process

and

Standard-Setting Committees

Remedial (Grant) Standard-Setting Process

Background

There are several acceptable strategies for setting standards on criterion-referenced tests. Each of the proposed methods has one or more unique characteristics. One common element to the various methods is that they all offer to the individuals who are setting the standards some process which reduces the arbitrariness of the resulting standard. Different methods accomplish this in different ways. All methods systematize the standard-setting process so that the result accurately reflects the collective informed judgment of those setting the standard.

Types of Standard-Setting Methods

Standard-setting methods can generally be categorized into three types: test question review, individual performance review and group performance review. Test question review methods specify a procedure for standard setters to examine each test question and make a judgment about that question. For example, standard setters might be asked to rate the difficulty or the importance of each question. These judgments are combined mathematically to produce a standard. Individual performance review methods also require standard setters to make judgments, but the judgments are made on the basis of examining data that indicate how well individual students perform on test items. These data may be based on actual pilot test results or projected results using mathematical theories. In this method, additional student information, such as grades, may also be used to inform the standard setters. Group performance review methods provide for judgments to be made based on the performance of a reference group of students. That is, standard setters review the group performance and make a determination where the standard should be set based on the group results.

Selection of a Standard-Setting Method

Several factors affect the choice of a particular standard-setting method. The type of test is one consideration. For example, some methods are only appropriate for multiple-choice questions or for single correct answer questions while other methods are more flexible. For instance, time constraints are a consideration if student performance data are necessary. In this case, a pilot test must be conducted and the test results must be analyzed prior to setting the standards. Another consideration is the relative importance of the decisions that will be made on the basis of the standard. For example, a classroom test affecting only a few students would not require as stringent a procedure as would a statewide test determining whether a student is allowed to graduate from high school. Other relevant factors include the number of test items, permanence of the standard, purpose of the test and the extent of available financial and other resources to support the standard-setting process.

On February 4, 1985, the Mastery Test Psychometrics Advisory Committee met to consider the issue of standard-setting procedures and voted unanimously to approve the following proposal.

A PROPOSAL FOR SETTING THE REMEDIAL STANDARDS ON THE CONNECTICUT MASTERY TESTS

1. Two standard-setting committees will be created: one for mathematics and one for reading and writing.

2. This description of a minimally proficient student will be given to each of the committees:

   > Imagine a student who is just proficient enough in reading, writing and mathematics to successfully participate in his/her regular fourth-grade coursework.

3a. In mathematics, an adaptation of the Angoff procedure will be used. The committee will be provided with each item appearing on one form of the mathematics test. The committee will be given the following directions:

   > Consider a group of 100 of these students who are just proficient enough to be successful in regular fourth-grade coursework. How many of them would be expected to correctly answer each of the questions?

   The committee will rate each item. The committee will then be given the opportunity to discuss their rating of each item. Sample pilot data will be presented. Committee members will be given the opportunity to adjust their item ratings. The item ratings will then be averaged in accordance with the Angoff procedure in order to produce a recommended test standard.

b. In reading, the committee will review and discuss each passage of the Degrees of Reading Power (DRP) test. Student performance data will be presented. The committee will consider the reading difficulty that should be expected of a student at the grade level being tested. The committee members will identify the passage that has the appropriate level of reading difficulty consistent with the above description of a minimally proficient student.

c. In writing, the committee will read four sample essays. These essays will have been prescored holistically (on a scale from 2 to 8) in order to rank the quality of the essays. Committee members will classify essays into one of three categories: 1) definitely NOT proficient, 2) borderline and 3) definitely proficient. These classifications will be discussed in light of the holistic scores. The committee will then classify approximately twenty-five additional essays. The essay ratings will be discussed in the same manner as the original four essays. When all essays have been discussed, the essays which fell in the borderline category will be focused upon to determine the standard. The committee will determine where, among the borderline essays, the standard should be established.

4. The standards recommended in step 3 will be presented to the Mastery Test Implementation Advisory Committee for discussion and action.

Connecticut's Strategy

Several steps were employed to create an acceptable and valid test standard for Connecticut tests. Initially, a separate standard-setting committee was convened for each test on which standards were to be set. Individuals were chosen to serve as members on the committee on the basis of their familiarity with the area being assessed and the nature of the examinees. One source of such members was the test content committees related to the project. For example, members of the Mathematics Advisory Committee were represented on the committee setting standards for the mathematics mastery test.

The actual procedures used to set standards were an adaptation of a method proposed by William Angoff (1970). This test question review method required members of a standard-setting committee to estimate the probability that a question would be correctly answered by examinees who possess no more than the minimally acceptable knowledge or skill in the areas being assessed. Standard setters then reviewed pilot test data for sample items as further evidence of the appropriateness of the judgments being made. The original probability estimates assigned to each test question were reviewed and adjustments made by the standard setters. The final individual item probabilities were summed to yield a suggested test standard for each member of the committee. The suggested standards were averaged across members of the committee to produce the recommended test standard.

The recommended test standard was presented to the Mastery Test Implementation Advisory Committee and the State Board of Education.

In mid-March 1985, Mathematics and Language Arts Standard-Setting Committees met to set the remedial standards for the Grade 4 Mastery Test. The following information summarized the results of the standard-setting activities conducted by CSDE staff:

I. Mathematics (100-item test)

Using the procedures previously outlined, the standard setters rated each item and considered the pilot data. Committee members discussed items and were given the opportunity to adjust their initial ratings. The final ratings were averaged to produce a remedial standard. It was recommended that a raw score of 69 be the remedial mathematics standard. Below is a summary of the ratings.

Procedure	# Judges	Range %	Mean % Correct	Raw Score
Angoff	21	56.7-81.3	68.7	68.7

II. Reading (Degrees of Reading Power, 56-item test)

Standard setters used two procedures to establish a remedial reading standard. First, they examined the passages in the Degrees of Reading Power (DRP) test, asking themselves which passage is too difficult for the student who is just proficient enough to successfully participate in fourth-grade coursework. Discussion occurred throughout this selection process.

Second, they examined textbooks which are typically used in grades three and four and selected those textbooks which a minimally proficient student would not be expected to read in order to successfully participate in fourth-grade coursework. Discussion occurred throughout this selection process.

The average readability values of the selected passages and textbooks and the pilot test data were then revealed to the standard setters. The standard setters discussed the readability values and the pilot test data and recommended the DRP unit score of 41 as the remedial standard. This standard was accepted by the State Board of Education at the 70% comprehension level. Below is a summary of the ratings.

Procedure	# Judges	Readability Range	Recommended Remedial Standard
A. Test Passage Review	17	42-48 DRP Units	41 DRP Units
B. Textbook Review	17	42-51 DRP Units	

III. Writing (45-minute writing sample)

Using the procedure previously outlined, standard setters read and rated 21 essays written to a narrative prompt and 21 essays written to an expository prompt. After discussions and final ratings, the holistic scores for the papers were revealed to the group. The committee then discussed the appropriate remedial writing standard in light of the degree to which their ratings matched the holistic scores. It was the recommendation of the committee that a holistic writing score of 4 be used as the remedial writing standard. Below is a summary of the ratings.

NARRATIVE PROMPT
Rating After Discussion

Holistic Score	Definitely NOT Proficient	Borderline	Definitely Proficient
2	84%	4%	12%
3	37%	6%	57%
4	4%	4%	92%
5	8%	6%	86%
6	20%	2%	78%
7	4%	0%	96%
8	4%	2%	94%

EXPOSITORY PROMPT
Rating After Discussion

Holistic Score	Definitely NOT Proficient	Borderline	Definitely Proficient
2	94%	0%	6%
3	33%	2%	65%
4	4%	12%	84%
5	0%	2%	98%
6	2%	4%	94%
7	0%	0%	100%
8	0%	0%	100%

Standard-Setting Committees

LANGUAGE ARTS STANDARD-SETTING COMMITTEE

Evelyn P. Burnham, Colebrook Public Schools
Nicholas P. Criscuolo, New Haven Public Schools
Mary R. Fisher, Thompson Public Schools
Marguerite Fuller, Bridgeport Public Schools
Anne Jackel, Thompson Public Schools
Dorothy Kaplan, Middletown Public Schools
Robert Kinder, CT State Department of Education
Bob Lincoln, Toll and Public Schools
Virginia Lity, Bridgeport Public Schools
Virginia Manulls, Colebrook Public Schools
Noreen McDermott, Hartford Public Schools
Elizabeth Nelligan, Canton Public Schools
Dorothy Nevers, Canton Public Schools
Carol D. Parmelee, Middletown Public Schools
Beverly R. Peterman, Stamford Public Schools
Geraldine Smith, Canton Public Schools
Mary Weinland, CT State Department of Education

MATHEMATICS STANDARD-SETTING COMMITTEE

Betsy Andersen, Manchester, Connecticut
Betsy Carter, CT State Department of Education
Geraldine M. Cemprola, Ridgefield Public Schools
Linda Cherry, Suffield Public Schools
Elizabeth B. Cubeta, Middletown Public Schools
Corretta K. Dean, Bridgeport Public Schools
Tony Ditrio, Norwalk Public Schools
Anita Gaston, Bloomfield Public Schools
Janet Heintz, Farmington Public Schools
Mary Anna Keough, Meriden Public Schools
Steven Leinwand, CT State Department of Education
Wesley Masten, Norwalk Public Schools
Irene B. Moriarty, Meriden Public Schools
Pamela Munro, Windham Public Schools
Eileen O'Reilly, Manchester Public Schools
Lois Piper, Norwalk Public Schools
Twila Pollard, New Haven Public Schools
Rosemary Powers, Bloomfield Public Schools
Sylvia E. Webb, Middletown Public Schools
George A. Wells, New Haven Public Schools
Frank K. Whittaker, Bridgeport Public Schools

APPENDIX E

Grade Four Overview of Holistic Scoring

and

Marker Papers for Holistic Scoring

An Overview of Holistic Scoring

Description of the Method

Holistic scoring involves judging a writing sample for its total effect. The scorer makes an overall evaluation taking into account all characteristics which distinguish good writing. No one feature (such as spelling, rhetoric, or organization) should be weighted to the exclusion of all other features. Contributing to the rationale underlying holistic scoring is evidence that:

- no aspect of writing can be judged independently and result in an overall score of quality;
- teachers can recognize and concur upon good writing samples; and
- teachers tend to rank entire pieces of writing in the same way, regardless of the importance they might attach to the particular components of writing.

The scoring scale for holistic scoring is determined by the quality of the specific samples being evaluated. That is, the success of a particular response is determined in relationship to the range of ability reflected in the set of writing samples being assessed.

Preparation for Scoring

Prior to the training/scoring sessions, a committee consisting of Connecticut State Department of Education (CSDE) consultants, representatives of the Language Arts Advisory Committee and other language arts specialists from throughout the state, two chief readers and a project director from Measurement Inc. of Durham, North Carolina and a reading specialist from The Psychological Corporation met and read a substantial number of essays drawn from the total pool of essays to be scored. Approximately 60 essays were selected to serve as "range-finders" or "marker papers" representing the range of achievement demonstrated in the total set of papers. Copies of those range-finders served as training papers during the scoring workshops which followed. Each range-finder paper was assigned a score according to a four-point scale, where 1 represented a poor paper and 4 represented a superior paper.

Scoring Workshops

During the month of November, several holistic scoring workshops were held in various locations throughout the state. Attendance at the grade four scoring workshops totaled 254 teachers. A chief reader and two assistants were present at every workshop in addition to representatives of the CSDE. Each workshop consisted of a training session and a scoring session.

Training and Qualifying

- All teachers were shown approximately fourteen range-finder papers. The chief reader discussed each paper and explained the reason why each received its score.

- All teachers were given a six-paper practice set. They scored the papers independently and recorded the scores on their papers. When all teachers were finished, the chief reader discussed each paper and explained why each received its score.

- All teachers were given a nine-paper training set. They scored the papers independently, based on an overall impression, and recorded their scores on a monitor sheet as well as on their papers. As they finished reading and scoring, they brought the monitor sheet to the team leader who checked the scores. When all teachers were finished and all monitor sheets were checked, the chief reader discussed the nine-paper set.

- Regardless of whether or not they qualified on the first training set, all teachers were then given another nine-paper training set. They scored the papers and had the monitor sheets checked. Set Two was not discussed, except with non-qualifiers.

- Teachers were considered qualified if they scored six or more papers correctly on either set. Teachers who met the standard began scoring live papers after Set Two.

- If any teacher did not qualify, they received additional training by one of the team leaders or by the chief reader away from the scoring room. They had two more opportunities to qualify. Any teacher who failed to qualify would have been excused from the project and paid for one day.

The Scoring Session

Once scorers qualified, actual scoring of the writing exercises began according to the steps outlined below:

- Scorers read each paper once carefully but quickly and designated a score. Again, the score reflected the scorer's overall impression of the response as it corresponded with the features of written composition which were internalized during the training process.

- Each paper was read and scored by a second scorer independently of the first, that is, without seeing the score assigned by the first reader. The chief reader had the responsibility of adjudicating any disagreement of more than one point between the judgments of the first two scorers. In other words, adjacent scores (i.e., awarded scores of 4 and 3, 1 and 2, 2 and 3) were acceptable, but larger discrepancies (i.e., scores of 2 and 4, 3 and 1, 1 and 4) were resolved by the chief reader. In general, with successful training, the occurrence of large score discrepancies is rare.

- The two scores for each paper were <u>added</u> to produce the final score for each student, resulting in scores between 2 and 8.

Understanding the Holistic Scores

Examples of actual student papers which are representative of the scoring range will assist the reader in understanding the statewide standard set for writing and interpreting the test results. Sample papers representing four different holistic scores are presented on the following pages. Note that the process of summing the scores assigned by the two readers expands the scoring scale to account for "borderline" papers. A paper which receives a 4 from both scorers (for a total score of 8) is likely to be better than a paper to which one reader assigns a 4 and another reader assigns a 3 (for a total score of 7). In addition, it should be emphasized that each of the score points represents a range of student papers--some 4 papers are better than others.

A score of Not Scorable (NS) was assigned to student papers in certain cases. A score of NS indicates that the student's writing skills remain to be assessed. The cases in which a score of NS was assigned were as follows:

- responses merely repeated the assignment;
- illegible responses;
- responses in languages other than English;
- responses that failed to address the assigned topic in any way; and
- responses that were too brief to score accurately, but which demonstrated no signs of serious writing problems (for example, a response by a student who wrote the essay first on scratch paper and who failed to get very much of it copied).

Both readers had to agree that a paper deserved a NS before this score was assigned. If the two readers disagreed, the chief reader arbitrated the discrepancy. Papers which were assigned a score of NS were not included in summary reports of test results.

Summary Comments

The fact that standards must be maintained and reinforced throughout a scoring session cannot be overemphasized. Holistic scoring depends for its usefulness on <u>consistency</u> of scoring among all scorers throughout the sessions.

WRITING ASSIGNMENT
Grade Four
Form D

Imagine that you got lost one day. Whom did you see? Where did you go? What did you do? Whom did you ask for help? How did you find your way back home?

Write a story telling your teacher what you did on the day you got lost.

- Tell what happened to you the day you got lost.
- Tell how you found your way home.

THE LOST KID

Once a kid got lost in the woods he was nine years old and his name was Billy. He was taking a shortcut there was snakes, cobwebs. A man got killed in there. Lived a killer with a mask and claws. His name was rockerhead. He was part bear, snake, fish, and man. It was said that if someone went there the person would die.

THE END

Score Point: 1

This is an unsuccessful narrative. There is evidence that the writer saw the prompt and attempted to respond to it. Although the writer sets up a story (once a kid got lost in the woods), the events are not sequenced.

One day I was Walking home from school when I took a wrong turn I did not know where I was. And I kept on Walking until I came upon a lady she could not tell me where I was so still I was Walking then I came across a police man. He took me home that day.

Score Point: 1

This response is organized and controlled, but the narrative is not sufficiently sustained or sufficiently elaborated for a higher score.

The day I got lost

One day I got lost in the woods when I was going to the park. I was scared so I looked for a hut and found one close by. I walked over to it. There was an old lady in it. So I asked to sleep there tonight and she let me so I slepped there. Then she let me use the phone so I called home and mom brought me back home and I never went in the woods alone again

Score Point: 2

In this response, the writer presents a sustained sequence of events with minimal elaboration (...when I was going to the park... close by...). The response is a minimally successful narrative.

I saw a guy in the wood's I told him my name came I told him where I live we walked deeper and deeper in the wood. He left me in the wood's I got lost again I can't find my way home maybe my mom is worry about me. I saw blue house It look like mine I saw a car in the driveway I saw a big guy he saw me and ran to him he said are you lost I said yes I can's find my mom? or my sister? or my dog? he said I know where your flaimly is follow me? I saw some of my friend's in my yard: I saw my mom and sister and Bow they saw me they said is that Jean I said mom this is me my mom had tear's in her eye's Bow was so happy to see my again they said welcome home Jean my mom said your sister is working down town New York I got a puppy's from Mydog: I the people whow were looking for me I pick my own puppy to keep Bow

The End

Score Point: 2

This response presents a sustained sequence of events. The organization is weak, however, in the middle of the story; the jump in time occurs without transition from being lost to being in the yard. The writer's control of the narrative deteriorates at the end.

I got lost

One day I was going for a walk in the woods. I saw lots of things like flowers, rabbits, fox, snakes, deer mushrooms and other animals. It was very beautiful. I could not believe how many animals there were. There were so many there that you could bend down and pck one up. I picked up a bird. It was very soft. Then I looked around. I did not know where I was! I kept looking until and looking until night. I saw a cave, so I slept in it. In the morning when I woke up, the birds were chirping. I was like a alarm clock. Then I saw a ranger. we talk for a long time. Then the ranger pointed me which way to go and gave me a map. He said "I would show you the way but I have to stay here." I said "No problem." And I found my way home safely.

Score Point: 3

This first-person response is a sustained narrative with vivid details that enhance the story (...flowers, rabbits, fox...and other animals...I picked up a bird. It was very soft...In the morning...the birds were chirping...like an alarm clock.) The narrative is organized and controlled.

CONNECTICUT MASTERY TEST WRITING SAMPLE

The Day I Got Lost

One nice sunny day me and my classroom went on a field trip off into the woods and we each got into groups and separated. Then we each chose a part off the woods. My group chose the east so the groups and I set off in to the woods and then we heard a noise behind us we turned around very slowly and there was a big bear right behind us the bear took slow steps forward us and we were all frightend of the big bear. We ran off into the woods and that bear was running after us then we saw a big tree and we ran to it then we climed up the big tree then we was safe. Just then I remembered the teacher had told us to meet her back where we were. So I looked at my watch and we were almost two hours late. Well just as long as were safe. One of the group members asked "Where are we, I said I don't know then all of us screamed and yelled "We're Lost!" Then we all calmed down for just a second. Then we heard noises like as if someone was chopping down the tree we were on and someone was chopping down

Page 6

the tree it was the bear we all screamed and just then the tree fell down. We all where still alive we forgot fear and ran then we were finally back to the place where we were supposed to be. Both then group was ugone so we started to look for them and then we meet a bear and it was the same one. I said dont tell me we have to do that again. Then a group member said "We do." So we "ran up" the big tree but this time the bear was not after us it was after the whole class so we ran down the tree and we ran with the classroom but it just past us so it wasn't after the class other but there was something else other we on it was a lion. So the class tried to find the way back but they couldn't. So I said start for a tree there was a tree so the whole class climed up the trees, but on couldn't make it and I got afraid and that was the teacher's kid and my best friend. Later that year it her been very boring. Sometimes it was fun but not as much fun we had when my best friend was around.

Score Point: 3

In this response, the narrative is sustained and details enhance the story line. However, the writer loses control of the events on the second page and the development of the narrative deteriorates. More consistent control is needed for a higher score.

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CONNECTICUT MASTERY TEST WRITING SAMPLE

I was lost in the woods. Well, let me start from the begining. I had gone hiking with my summer camp. I had seen a squirrel. It had run. I had run after it. The squirrel had led me deep in the woods. By now it was early afternoon. I stoppted for I was out of breath. The squirrel was fuzzy and brown with a white stripe up its tail. Well there was something I had forgot, I had on a back-pack. I took it off. Then I unzipperd it. It had a sandwich inside. I took it out. Peanut butter and jelly, my favorite. I ate it. There was also some grape juice, chips, and cookies. I started eating. Then I got up. I started back the way I came. Then there was a fork in the path. Which way should I go? I started on the right path. There were green ferns all around me. I walked for a long time. Then I sat down I took out a green fuzzy warm blanket and layed down. I knew I would have to start walking in a little while. I fell asleep when I woke up I wasn't at the tree anymore. I started to come to. I was in a oak log cabin near a fire. How did I get here? Who took me here? Some one opened the door. A man with

Page 6

old jeans, a shirt, and boots stepped into the room. William a fugitive hiding from the police stepped in. Oh no! He bound me and gagged me. I tried to scream. I couldn't. He left. I started to work on my bonds. I finally got free. I would need to get out. William must have thought I couldn't get free. I opended the door and started walking. Then I ran. Then I came to the fork in the road. I ran into the right fork and started running and running. I ran into my camp group. Winlow could be heard screaming in the distance. I could hear dogs with him. We all ran. Finally we hid in some under brush. He passed. Then we ran back to camp. We ate a dinner of hot dogs. Then I called the police. They caught him two weeks later. I was very very very glad.

The End

Score Point: 4

This response reads smoothly from beginning to end. It is very well elaborated with many vivid and appropriate details. This is a fully developed and complete narrative.

Page 7

-54-

70

71

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One day Mark was over my house playing football. We were having a lot of fun until a black hole appeared in the ground. Mark drop the football in the hole the he slipped in the hole. So I followed him down the hole. Then the hole disapeared. There was a path so we walk down the path. It was pretty cool. We saw a lot of chest, but we didn't have a key to open them. It was getting dark and we were cold and hungry. After an hour we fell asleep. When we woke up there was a kid staring at us. We where scared at first, but then he said I am your friend. His name was José. He said he was traped here for years. He asked us if we wanted to see where he lives. So we said okay. He showed us some old keys. We asked him if they went the chest. He said what chest. So we said we will show you the chest. When we got to the chest he tried one key and it opened! There was a lot of gold and silver. We tried another one and it opened! There was gold and silver! he had one more key but there were more chest. We walked back to his place. We played a few games and he told us how he got here. He said he got here from

Africa. He also told us his long journey how he got all the way over here. Then we made a fire and went to sleep. The next moring he told us he had a pet cheetah, but he was lost. Then some other bullys come over where we were so we ran and hid in a tree! Then his cheetah come along and scared the bullys away. He so happy to see his cheetah! We took a small walk and found another chest! So José opened the chest and there were two black holes in it. There was also a message that sait use these to get home! So we all took the chest to José's place. We got our treasures and we put the hole on the ground and jump though it, one we all ended up at my house! José stayed here for the rest of his life and we were all rich.

Score Point: 4

This narrative is complicated, but the student maintains good control. Numerous vivid details contribute to the action-packed sequence of events, resulting in a thoroughly developed narrative with a sense of completeness.

APPENDIX F

Grade Four Analytic Rating Guide

and

Marker Papers for Analytic Scoring

Grade Four Analytic Rating Guide

FOCUS: How effectively does the writer unify the paper by a dominant topic?

1 = switches and/or drifts frequently from the dominant topic

2 = switches and/or drifts somewhat from the dominant topic

3 = stays on topic throughout the response

ORGANIZATION: Is there a plan that clearly governs the sequence from the beginning to the end of the response, and is the plan effectively signaled?

1 = no discernible plan

2 = inferable plan and/or discernible sequence; some signals may be present

3 = controlled, logical sequence with a clear plan

SUPPORT/ELABORATION: To what extent is the narrative developed by details that describe and explain the narrative elements (character, action and setting)?

1 = vague or sketchy details that add little to the clarity of the response or specific details but too few to be called list-like

2 = details that are clear and specific but are list-like, or uneven, or not developed

3 = somewhat developed details that enhance the clarity of the response

CONVENTIONS: To what extent does the student use the conventions of standard written English (e.g., sentence formation, spelling, usage, capitalization, punctuation)?

1 = many errors

2 = some errors

3 = few errors

CONNECTICUT MASTERY TEST WRITING SAMPLE

I go and tell the Poles That I am lost and tell the polse What St I Live on and I go to the poles sign and go to the phoe and call min Farther and tell the St That am on and tell That I am lost and tell him That am in the polessarn and call a cop tell him to take me to a tine and call my Farther and tell That am at the tine and I wat take a bus and I was Waln and I Wake to a phoe and Cell my Farthe and tell him The St I am on and take bus and wa

FOCUS = 3
ORGANIZATION = 1
SUPPORT/ELABORATION = 1
CONVENTIONS = 1

Page 6

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CONNECTICUT MASTERY TEST WRITING SAMPLE

I Saw a guy in the wood's I told him my mom's name I told him where I live We walked deeper and deeper in the wood. He left me in the wood's I got lost again I can't find my way home maybe my mom is worry about me. I saw blue house It looks like mine I Saw a car in the driveway I saw a big guy he saw me and ran to him he said are you lost I said yes I can's find my mom? or my sister? or my dog? he said I know where your flaimly is follow me? I Saw some of my friend's in my yard: I Saw my mom and sister and Bow they Saw me They said is that Jean I said mom this is me my mom had tear's in her eyes Bow was so happy to see my again they said welcome home Jean my mom said your sister is working down town New York I got a puppy's from My dog? I the people who were looking for me I pick my own puppy to keep and Bow

The End

FOCUS = 3
ORGANIZATION = 2
SUPPORT/ELABORATION = 2
CONVENTIONS = 2

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CONNECTICUT MASTERY TEST WRITING SAMPLE

One day I was Walking home from school When I took a wrong turn I did not know where I was. And I kept on Walking until I came upon a lady she could not tell me where I was so still I was Walking than I came across a police man. He took me home that day.

FOCUS = 3
ORGANIZATION = 3
SUPPORT/ELABORATION = 1
CONVENTIONS = 2

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APPENDIX G

Sample Grade Four Mastery Test Score Reports

- o Class Diagnostic Report
  - Mathematics
- o School by Class Report
  - Mathematics
- o District by School Report
  - Mathematics
- o Class Diagnostic Report
  - Language Arts
- o School by Class Report
  - Language Arts
- o District by School Report
  - Language Arts
- o Parent/Student Diagnostic Report

CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

MATHEMATICS PART 1 OF 2

THE PSYCHOLOGICAL CORPORATION

TEACHER: A B
GROUP CODE: 217
SCHOOL: B
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 04 FORM: D

TEST DATE: 10/90

NUMBER OF STUDENTS TESTED: 26

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS IN MATHEMATICS : 9

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	QUINCY	CARMEN	JANELLE	KEVIN	RAFAEL	JENNIFER	MICHELE	LUIS	BETSY	MARITZA	ESMERALDA	LUIS	JEAN	DONISHA	JASON	GIOVANNI	JESSICA	HILJAY	NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE CLASS # / %	SCHOOL # / %	DISTRICT # / %
CONCEPTUAL UNDERSTANDINGS																						
1. Determine 1 & 10 more/less than a number	3 of 4	3	4	3	4	3	3	4	4	4	4	2	3	4	4	4	4	4	4	22/ 85	74/ 73	1159/ 78
2. Extend patterns	3 of 4	1	1	3	2	3	1	2	2	4	2	3	0	2	3	2	2	1	4	10/ 38	42/ 41	773/ 52
3. Order whole numbers	3 of 4	1	2	4	2	2	4	3	2	4	4	1	2	3	4	4	3	3	1	14/ 54	50/ 49	957/ 64
4. Rewrite numbers using expanded notation	3 of 4	2	3	2	3	3	3	4	3	4	3	4	2	4	3	4	3	4	4	23/ 88	82/ 80	1310/ 88
5. Rewrite numbers by regrouping	3 of 4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0/ 0	5/ 5	290/ 19
6. Identify fractional parts	3 of 4	1	2	2	2	2	3	3	3	4	4	2	1	0	4	3	4	4	0	15/ 58	64/ 63	1064/ 71
7. Relate mult/division facts to pictures	3 of 4	0	3	3	2	2	1	2	2	2	4	3	2	2	4	2	3	3	4	11/ 42	52/ 51	834/ 56
COMPUTATIONAL SKILLS																						
8. Add/subtract facts to 18	3 of 4	3	4	4	3	4	3	4	4	4	4	4	4	4	3	4	4	4	4	26/100	94/ 92	1430/ 96
9. Add/subtract without regrouping	3 of 4	4	4	3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	3	26/100	100/ 98	1447/ 97
10. Add with regrouping	3 of 4	2	4	4	3	4	4	4	3	3	4	3	3	4	4	4	4	3	4	24/ 92	89/ 87	1333/ 89
11. Estimate sums and differences	3 of 4	0	2	4	0	2	0	0	0	3	4	1	1	2	1	3	1	2	0	5/ 19	21/ 21	489/ 33
12. Multiply and divide by 2, 5, 10	3 of 4	1	4	3	4	3	1	1	3	4	4	4	3	3	4	4	3	4	4	20/ 77	70/ 69	1040/ 70

\# INDICATES A SCORE BELOW THE REMEDIAL STANDARD
THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

A = ABSENT
V = VOID

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CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

MATHEMATICS PART 2 OF 2

THE PSYCHOLOGICAL CORPORATION

TEACHER: A B
GROUP CODE: 217
SCHOOL: B
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

TEST DATE: 10/90

NUMBER OF STUDENTS TESTED: 26

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS IN MATHEMATICS : 9

GRADE: 04 FORM: D

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	QUINCY	CARMEN	JANELLE	KEVIN	RAFAEL	JENNIFER	MICHELLE	LUIS	BETSY	MARITZA	ESMERALDA	LUIS	JEAN	DONISHA	JASON	GIOVANNA	JESSICA	HILARY	JAY	NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE CLASS # / %	SCHOOL # / %	DISTRICT # / %
PROBLEM SOLVING AND APPLICATIONS																							
13. Identify objects/numbers in an array	3 of 4	3	3	4	3	3	2	4	4	3	3	3	1	2	4	4	3	4	3		21/ 81	65/ 64	1110/ 74
14. Read and interpret graphs	3 of 4	2	4	4	4	4	3	3	3	3	4	2	3	4	3	3	3	3	4		23/ 88	96/ 94	1385/ 93
15. Read and interpret tables	3 of 4	3	3	4	2	4	1	3	4	4	3	3	3	4	4	4	4	3	3		22/ 85	91/ 89	1273/ 85
16. Identify number sentences from pictures	3 of 4	1	2	3	1	2	1	3	2	3	4	1	3	3	4	2	2	2	1		10/ 38	48/ 47	845/ 57
17. Identify number sentences from problems	3 of 4	2	4	4	4	4	0	4	3	3	4	4	4	2	4	3	4	3	4		22/ 85	82/ 80	1280/ 86
18. Solve story problems using add/sub	3 of 4	4	4	4	3	4	4	3	4	4	4	2	4	4	4	4	4	4	3		22/ 85	83/ 81	1258/ 84
19. Solve story problems with extra info	3 of 4	1	3	0	3	4	3	1	3	3	4	0	3	3	3	2	4	1	4		14/ 54	48/ 47	764/ 51
20. Identify needed information in problems	3 of 4	3	4	3	2	3	4	4	4	4	4	2	3	4	4	3	1	2	4		17/ 65	65/ 64	1037/ 69
MEASUREMENT AND GEOMETRY																							
21. Measure length/identify units	3 of 4	1	2	3	2	3	2	3	2	4	3	2	2	2	4	4	1	1	3		11/ 42	66/ 65	944/ 63
22. Estimate length/area	3 of 4	1	4	4	3	3	1	2	2	3	4	3	3	2	4	3	2	3	3		17/ 65	59/ 58	893/ 60
23. Tell time	3 of 4	3	4	2	3	4	1	4	4	3	3	4	4	4	4	3	4	3	2		20/ 77	74/ 73	1195/ 80
24. Determine the value of a set of coins	3 of 4	3	4	4	2	3	4	2	4	3	4	4	3	2	4	3	1	2	4		17/ 65	79/ 77	1277/ 86
25. Identify shapes/angles/sides	3 of 4	3	3	4	4	4	4	3	4	4	3	4	4	4	3	4	4	4	4		24/ 92	98/ 96	1452/ 97
TOTAL NUMBER OF OBJECTIVES MASTERED			10	18	20	14	19	13	17	17	23	23	14	16	15	23	20	17	17	19	AVERAGE NUMBER OF OBJECTIVES MASTERED 16.8	16.6	18.0
NUMBER OF ITEMS CORRECT (MATHEMATICS REMEDIAL STANDARD)	69 OF 100	* 48	77	78	* 65	77	* 57	70	73	85	88	* 65	* 65	71	88	81	72	71	74		NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARDS 9/ 35	42/ 41	475/ 32

* INDICATES A SCORE BELOW THE REMEDIAL STANDARD
THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

A = ABSENT
V = VOID

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CONNECTICUT MASTERY TESTING PROGRAM

SCHOOL BY CLASS REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D

SCHOOL: B
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:
TEST DATE: 10/90
Scores indicate Number/Percent of students mastering each objective

MATHEMATICS

		206	217	221	247					SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED		25	26	24	27					102	1499
OBJECTIVES	MASTERY CRITERIA	#/%	#/%	#/%	#/%					#/%	#/%
CONCEPTUAL UNDERSTANDINGS											
1. Determine 1 & 10 more/less than a number	3 of 4	24/ 96	22/ 85	16/ 67	12/ 44					74/ 73	1159/ 78
2. Extend patterns	3 of 4	12/ 48	10/ 38	12/ 50	8/ 30					42/ 41	773/ 52
3. Order whole numbers	3 of 4	17/ 68	14/ 54	11/ 46	8/ 30					50/ 49	957/ 64
4. Rewrite numbers using expanded notation	3 of 4	22/ 88	23/ 88	20/ 83	17/ 63					82/ 80	1310/ 88
5. Rewrite numbers by regrouping	3 of 4	3/ 12	0/ 0	1/ 4	1/ 4					5/ 5	290/ 19
6. Identify fractional parts	3 of 4	20/ 80	15/ 58	14/ 58	15/ 56					64/ 63	1064/ 71
7. Relate mult/division facts to pictures	3 of 4	15/ 60	11/ 42	14/ 58	12/ 44					52/ 51	834/ 56
COMPUTATIONAL SKILLS											
8. Add/subtract facts to 18	3 of 4	24/ 96	26/100	23/ 96	21/ 78					94/ 92	1430/ 96
9. Add/subtract without regrouping	3 of 4	25/100	26/100	23/ 96	26/ 96					100/ 98	1447/ 97
10. Add with regrouping	3 of 4	24/ 96	24/ 92	20/ 83	21/ 78					89/ 87	1333/ 89
11. Estimate sums and differences	3 of 4	7/ 28	5/ 19	7/ 29	2/ 7					21/ 21	489/ 33
12. Multiply and divide by 2, 5, 10	3 of 4	21/ 84	20/ 77	14/ 58	15/ 56					70/ 69	1040/ 70
PROBLEM SOLVING AND APPLICATIONS											
13. Identify objects/numbers in an array	3 of 4	15/ 60	21/ 81	15/ 63	14/ 52					65/ 64	1110/ 74
14. Read and interpret graphs	3 of 4	24/ 96	23/ 88	24/100	25/ 93					96/ 94	1385/ 93
15. Read and interpret tables	3 of 4	24/ 96	22/ 85	22/ 92	23/ 85					91/ 89	1273/ 85
16. Identify number sentences from pictures	3 of 4	14/ 56	10/ 38	11/ 46	13/ 48					48/ 47	845/ 57
17. Identify number sentences from problems	3 of 4	22/ 88	22/ 85	20/ 83	18/ 67					82/ 80	1280/ 86
18. Solve story problems using add/sub	3 of 4	23/ 92	22/ 85	21/ 88	17/ 63					83/ 81	1258/ 84
19. Solve story problems with extra info	3 of 4	15/ 60	14/ 54	14/ 58	5/ 19					48/ 47	764/ 51
20. Identify needed information in problems	3 of 4	20/ 80	17/ 65	17/ 71	11/ 41					65/ 64	1037/ 69
MEASUREMENT AND GEOMETRY											
21. Measure length/identify units	3 of 4	23/ 92	11/ 42	19/ 79	13/ 48					66/ 65	944/ 63
22. Estimate length/area	3 of 4	17/ 68	17/ 65	15/ 63	10/ 37					59/ 58	893/ 60
23. Tell time	3 of 4	20/ 80	20/ 77	19/ 79	15/ 56					74/ 73	1195/ 80
24. Determine the value of a set of coins	3 of 4	21/ 84	17/ 65	19/ 79	22/ 81					79/ 77	1277/ 86
25. Identify shapes/angles/sides	3 of 4	24/ 96	24/ 92	24/100	26/ 96					98/ 96	1452/ 97
AVERAGE NUMBER OF OBJECTIVES MASTERED		19.0	16.8	17.3	13.7					16.6	18.0
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD*		6/ 24	9/ 35	7/ 29	20/ 74					42/ 41	475/ 32

* Remedial Standard is 69 of 100 Items Correct.

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CONNECTICUT MASTERY TESTING PROGRAM

DISTRICT BY SCHOOL REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D

DISTRICT: B DISTRICT
DISTRICT CODE:
TEST DATE: 10/90
Scores indicate Number/Percent of students mastering each objective

MATHEMATICS

OBJECTIVES	MASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H		DISTRICT
NUMBER OF STUDENTS TESTED		102	73	41	74	49	44	54	24		1499
CONCEPTUAL UNDERSTANDINGS											
1. Determine 1 & 10 more/less than a number	3 of 4	74/ 73	59/ 81	29/ 71	64/ 86	42/ 86	26/ 60	35/ 65	24/100		1159/ 78
2. Extend patterns	3 of 4	42/ 41	37/ 51	20/ 49	34/ 46	26/ 53	19/ 44	20/ 37	16/ 67		773/ 52
3. Order whole numbers	3 of 4	50/ 49	39/ 53	21/ 51	46/ 62	32/ 65	32/ 74	33/ 61	19/ 79		957/ 64
4. Rewrite numbers using expanded notation	3 of 4	82/ 80	63/ 86	34/ 83	67/ 91	44/ 90	34/ 79	42/ 78	24/100		1310/ 88
5. Rewrite numbers by regrouping	3 of 4	5/ 5	15/ 21	6/ 15	9/ 12	11/ 22	4/ 9	2/ 4	6/ 25		290/ 19
6. Identify fractional parts	3 of 4	64/ 63	55/ 75	24/ 59	63/ 85	37/ 76	28/ 65	30/ 56	20/ 83		1064/ 71
7. Relate mult/division facts to pictures	3 of 4	52/ 51	27/ 37	20/ 49	41/ 55	32/ 65	18/ 42	25/ 46	14/ 58		834/ 56
COMPUTATIONAL SKILLS											
8. Add/subtract facts to 18	3 of 4	94/ 92	67/ 92	37/ 90	71/ 96	49/100	41/ 95	52/ 96	24/100		1430/ 96
9. Add/subtract without regrouping	3 of 4	100/ 98	68/ 93	40/ 98	70/ 95	49/100	40/ 93	52/ 96	24/100		1447/ 97
10. Add with regrouping	3 of 4	89/ 87	64/ 88	34/ 83	70/ 95	46/ 94	41/ 95	47/ 87	23/ 96		1333/ 89
11. Estimate sums and differences	3 of 4	21/ 21	17/ 23	12/ 29	24/ 32	13/ 27	7/ 16	15/ 28	13/ 54		489/ 33
12. Multiply and divide by 2, 5, 10	3 of 4	70/ 69	50/ 68	27/ 66	59/ 80	36/ 73	31/ 72	29/ 54	14/ 58		1040/ 70
PROBLEM SOLVING AND APPLICATIONS											
13. Identify objects/numbers in an array	3 of 4	65/ 64	57/ 78	30/ 73	52/ 70	43/ 88	29/ 67	40/ 74	22/ 92		1110/ 74
14. Read and interpret graphs	3 of 4	96/ 94	64/ 88	36/ 88	66/ 89	46/ 96	38/ 88	48/ 89	23/ 96		1385/ 93
15. Read and interpret tables	3 of 4	91/ 89	59/ 81	30/ 73	64/ 86	41/ 85	37/ 86	44/ 81	21/ 88		1273/ 85
16. Identify number sentences from pictures	3 of 4	48/ 47	39/ 53	20/ 49	44/ 59	31/ 65	22/ 51	26/ 48	20/ 83		845/ 57
17. Identify number sentences from problems	3 of 4	82/ 80	63/ 86	30/ 73	62/ 84	38/ 79	35/ 81	44/ 81	23/ 96		1280/ 86
18. Solve story problems using add/sub	3 of 4	83/ 81	58/ 79	27/ 66	58/ 78	43/ 90	35/ 81	39/ 72	21/ 88		1258/ 84
19. Solve story problems with extra info	3 of 4	48/ 47	37/ 51	20/ 49	26/ 35	28/ 58	19/ 44	19/ 35	21/ 88		764/ 51
20. Identify needed information in problems	3 of 4	65/ 64	50/ 68	22/ 54	49/ 66	38/ 79	29/ 67	32/ 59	20/ 83		1037/ 69
MEASUREMENT AND GEOMETRY											
21. Measure length/identify units	3 of 4	66/ 65	40/ 55	27/ 66	45/ 61	26/ 53	31/ 72	24/ 44	16/ 67		944/ 63
22. Estimate length/area	3 of 4	59/ 58	41/ 56	22/ 54	38/ 51	30/ 61	23/ 53	34/ 63	12/ 50		893/ 60
23. Tell time	3 of 4	74/ 73	55/ 75	33/ 80	60/ 81	38/ 79	32/ 74	42/ 78	22/ 92		1195/ 80
24. Determine the value of a set of coins	3 of 4	79/ 77	56/ 77	35/ 85	68/ 92	42/ 88	39/ 91	42/ 78	23/ 96		1277/ 86
25. Identify shapes/angles/sides	3 of 4	98/ 96	71/ 97	39/ 95	73/ 99	47/ 98	43/100	54/100	24/100		1452/ 97
AVERAGE NUMBER OF OBJECTIVES MASTERED		16.6	17.1	16.5	17.9	18.6	17.1	16.1	20.4		18.0
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD*		42/ 41	26/ 36	19/ 46	22/ 30	15/ 31	18/ 43	23/ 43	3/ 13		475/ 32

* Remedial Standard is 69 of 100 Items Correct.

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CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

LANGUAGE ARTS

THE PSYCHOLOGICAL CORPORATION

TEACHER: A B
GROUP CODE: 217
SCHOOL: B
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 04 FORM: O

TEST DATE: 10/90

NUMBER OF STUDENTS TESTED: 26

NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS
IN WRITING : 4
IN READING : 15

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	QUINCY	CARMEN	JANELL	KEVIN	RAFAEL	JENNIFER	MICHELLE	LUIS	BETSY	MARITZA	ESMERALDA	LUIS	JEAN	DONISHA	JASON	GIOVANNI	JESSICA	MILLAY	NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE CLASS # / %	SCHOOL # / %	DISTRICT # / %
WRITING MECHANICS																						
1. Capitalization and Punctuation	9 of 12	6	8	10	7	6	7	6	7	8	9	6	7	8	7	12	4	4	3	7/ 28	48/ 48	779/ 53
2. Spelling (words/homonyms/abbreviations)	7 of 9	7	7	6	7	5	9	8	8	7	6	7	5	9	6	8	7	6	6	16/ 62	54/ 53	952/ 65
3. Agreement	11 of 15	15	11	15	11	11	9	12	12	12	12	8	9	13	14	12	9	8	11	18/ 72	53/ 52	887/ 60
LOCATING INFORMATION																						
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	10	9	7	7	10	7	8	10	10	9	5	5	6	10	9	8	7	9	14/ 56	53/ 52	984/ 67
LISTENING COMPREHENSION																						
5. Literal	5 of 7	5	2	3	4	4	5	4	5	6	4	3	2	5	4	5	4	4	4	9/ 35	35/ 34	603/ 41
6. Inferential and Evaluative	9 of 13	7	4	9	7	8	7	5	6	9	9	6	9	8	6	8	10	7	9	8/ 31	25/ 25	378/ 26
READING COMPREHENSION																						
7. Literal	9 of 12	9	11	5	5	10	7	9	8	7	11	4	7	7	10	11	9	5	7	11/ 44	40/ 40	652/ 44
8. Inferential	10 of 14	10	8	9	6	12	11	9	8	6	7	12	9	10	6	12	10	6	8	9/ 36	34/ 34	567/ 39
9. Evaluative	7 of 10	4	3	5	4	5	4	6	5	6	4	3	4	4	3	7	8	2	2	3/ 12	23/ 23	408/ 28
																				AVERAGE NUMBER OF OBJECTIVES MASTERED		
TOTAL NUMBER OF OBJECTIVES MASTERED		6	4	3	2	4	3	4	4	5	5	2	1	4	3	8	6	0	3	5.8	3.6	4.3
HOLISTIC MEASURES OF WRITING AND READING	REMEDIAL STANDARDS																			NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARDS		
WRITING SAMPLE	4 OF 8	*3	5	NS	5	5	6	5	5	6	5	*3	4	6	5	5	5	4	5	4/ 17	28/ 28	375/ 26
**ANALYTIC SCORES: FOCUS		3										3	3					3				
ORGANIZATION		2										1	2					2				
SUPPORT/ELABORATION		1										1	1					1				
CONVENTIONS		1										1	1					1				
DEGREES OF READING POWER (DRP)™.	41 DRP UNITS	* 38	41	41	* 37	45	* 37	45	43	* 37	44	* 35	* 38	44	48	43	43	* 51	* 38	15/ 58	68/ 67	817/ 55

* INDICATES A SCORE BELOW THE REMEDIAL STANDARD. THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS. A = ABSENT
** ANALYTIC SCORES ARE GIVEN ONLY FOR THOSE STUDENTS WHO SCORED AT OR BELOW THE REMEDIAL STANDARD V = VOID
1 = NEEDS REMEDIAL ASSISTANCE 2 = BORDERLINE PERFORMANCE 3 = SATISFACTORY PERFORMANCE NS = NOT SCORABLE

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CONNECTICUT MASTERY TESTING PROGRAM

SCHOOL BY CLASS REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D

SCHOOL: B
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:
TEST DATE: 10/90
Scores indicate Number/Percent of students mastering each objective

206 | 217 | 221 | 247

LANGUAGE ARTS

										SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED		25	26	24	27					102	1495
OBJECTIVES	MASTERY CRITERIA	#/%	#/%	#/%	#/%					#/%	#/%
WRITING MECHANICS											
1. Capitalization and Punctuation	9 of 12	16/ 64	7/ 28	15/ 63	10/ 37					48/ 48	779/ 53
2. Spelling (words/homonyms/abbreviations)	7 of 9	19/ 76	16/ 62	9/ 38	10/ 37					54/ 53	952/ 65
3. Agreement	11 of 15	18/ 72	18/ 72	11/ 46	6/ 22					53/ 52	887/ 60
LOCATING INFORMATION											
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	20/ 80	14/ 56	11/ 46	8/ 30					53/ 52	984/ 67
LISTENING COMPREHENSION											
5. Literal	5 of 7	11/ 44	9/ 35	11/ 46	4/ 15					35/ 34	603/ 41
6. Inferential and Evaluative	9 of 13	13/ 52	8/ 31	3/ 13	1/ 4					25/ 25	378/ 26
READING COMPREHENSION											
7. Literal	9 of 12	18/ 72	11/ 44	6/ 25	5/ 19					40/ 40	652/ 44
8. Inferential	10 of 14	14/ 56	9/ 36	7/ 29	4/ 15					34/ 34	567/ 39
9. Evaluative	7 of 10	12/ 48	3/ 12	4/ 17	4/ 15					23/ 23	408/ 28
HOLISTIC MEASURES OF WRITING AND READING										#/% OF STUDENTS AT STATED LEVEL	
WRITING SAMPLE NUMBER/PERCENT PRODUCING MATERIAL THAT IS:	HOLISTIC SCORE	#/%	#/%	#/%	#/%					#/%	#/%
Well written with developed supportive detail	7 or 8	0/ 0	0/ 0	0/ 0	0/ 0					0/ 0	64/ 4
Generally well organized with supportive detail	5 or 6	7/ 28	16/ 67	6/ 26	2/ 7					31/ 31	478/ 33
Minimally proficient	4	14/ 56	4/ 17	14/ 61	8/ 30					40/ 40	533/ 37
Below the remedial standard*	2 or 3	4/ 16	4/ 17	3/ 13	17/ 63					28/ 28	375/ 26
DEGREES OF READING POWER (DRP)™ NUMBER/PERCENT OF STUDENTS	DRP UNIT SCORE	#/%	#/%	#/%	#/%					#/%	#/%
At/above the reading goal for beginning grade 04	50+	6/ 24	0/ 0	0/ 0	0/ 0					6/ 6	237/ 16
Below the reading goal for beginning grade 04 but above the remedial standard	1 to 49	6/ 24	11/ 42	5/ 21	6/ 22					28/ 27	430/ 29
Below the remedial standard**	BELOW 41	13/ 52	15/ 58	19/ 79	21/ 78					68/ 67	817/ 55
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS		5.6	3.8	3.2	1.9					3.6	4.3
AVERAGE HOLISTIC WRITING SCORE		4.1	4.7	4.1	3.1					4.0	4.2
AVERAGE DRP UNIT SCORE		42	40	36	35					38	40

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*Remedial Standard is 4 for Writing.
**Remedial Standard is 41 DRP Units for Reading.

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CONNECTICUT MASTERY TESTING PROGRAM

DISTRICT BY SCHOOL REPORT

THE PSYCHOLOGICAL CORPORATION

GRADE: 04 FORM: D

DISTRICT: B DISTRICT
DISTRICT CODE:
TEST DATE: 10/90
Scores indicate Number/Percent of students mastering each objective

LANGUAGE ARTS

OBJECTIVES	MASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H		DISTRICT
NUMBER OF STUDENTS TESTED		102	72	41	73	49	44	54	24		1495
		#/%	#/%	#/%	#/%	#/%	#/%	#/%	#/%		#/%
WRITING MECHANICS											
1. Capitalization and Punctuation	9 of 12	48/ 48	29/ 40	21/ 51	35/ 49	29/ 62	24/ 55	31/ 57	13/ 57		779/ 53
2. Spelling (words/homonyms/abbreviations)	7 of 9	54/ 53	45/ 63	25/ 61	43/ 61	35/ 73	25/ 57	35/ 65	17/ 71		952/ 65
3. Agreement	11 of 15	53/ 52	42/ 58	21/ 51	35/ 49	31/ 66	30/ 68	28/ 52	19/ 83		887/ 60
LOCATING INFORMATION											
4. Locating Information (schedules, maps, table of contents & title page, and dictionary)	8 of 11	53/ 52	60/ 83	23/ 56	46/ 65	40/ 85	31/ 70	30/ 56	20/ 87		984/ 67
LISTENING COMPREHENSION											
5. Literal	5 of 7	35/ 34	26/ 36	13/ 32	27/ 38	26/ 54	15/ 34	21/ 39	12/ 50		603/ 41
6. Inferential and Evaluative	9 of 13	25/ 25	11/ 15	9/ 22	12/ 17	13/ 27	6/ 14	14/ 26	7/ 29		378/ 26
READING COMPREHENSION											
7. Literal	9 of 12	40/ 40	24/ 33	15/ 37	29/ 40	26/ 54	17/ 40	21/ 39	12/ 50		652/ 44
8. Inferential	10 of 14	34/ 34	21/ 29	16/ 39	23/ 32	24/ 50	13/ 30	19/ 35	12/ 50		567/ 39
9. Evaluative	7 of 10	23/ 23	13/ 18	7/ 17	19/ 26	19/ 40	5/ 12	17/ 31	12/ 50		408/ 28
HOLISTIC MEASURES OF WRITING AND READING										#/% OF STUDENTS AT STATED LEVEL	
WRITING SAMPLE NUMBER/PERCENT PRODUCING MATERIAL THAT IS:	HOLISTIC SCORE	#/%	#/%	#/%	#/%	#/%	#/%	#/%	#/%		#/%
Well written with developed supportive detail	7 or 8	0/ 0	3/ 4	1/ 3	0/ 0	4/ 8	0/ 0	5/ 10	0/ 0		64/ 4
Generally well organized with supportive detail	5 or 6	31/ 31	14/ 19	5/ 13	24/ 34	16/ 33	13/ 30	18/ 35	7/ 29		478/ 33
Minimally proficient	4	40/ 40	25/ 35	16/ 40	25/ 35	24/ 50	15/ 34	10/ 19	14/ 58		533/ 37
Below the remedial standard*	2 or 3	28/ 28	30/ 42	18/ 45	22/ 31	4/ 8	16/ 36	19/ 37	3/ 13		375/ 26
DEGREES OF READING POWER (DRP)™ NUMBER/PERCENT OF STUDENTS	DRP UNIT SCORE	#/%	#/%	#/%	#/%	#/%	#/%	#/%	#/%		#/%
At/above the reading goal for beginning grade 04	50+	6/ 6	8/ 11	3/ 7	9/ 12	15/ 31	3/ 7	12/ 22	5/ 21		237/ 16
Below the reading goal for beginning grade 04 but above the remedial standard	41 to 49	28/ 27	32/ 44	12/ 29	20/ 27	16/ 33	10/ 23	14/ 26	9/ 38		430/ 29
Below the remedial standard**	BELOW 41	68/ 67	32/ 44	26/ 63	44/ 60	18/ 37	30/ 70	28/ 52	10/ 42		817/ 55
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS		3.6	3.8	3.7	3.8	5.1	3.8	4.0	5.4		4.3
AVERAGE HOLISTIC WRITING SCORE		4.0	3.6	3.7	4.0	4.6	3.8	4.3	4.2		4.2
AVERAGE DRP UNIT SCORE		38	40	37	39	43	37	41	42		40

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*Remedial Standard is 4 for Writing.
**Remedial Standard is 41 DRP Units for Reading.

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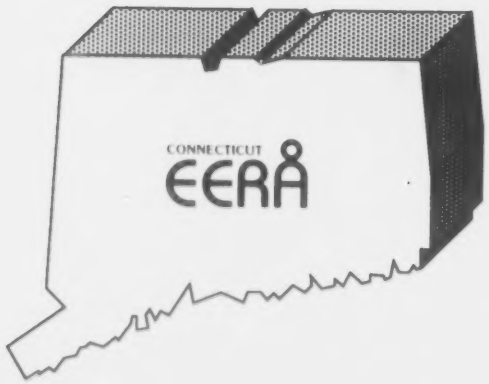
Connecticut Mastery Testing Program

GRADE 4



PARENT / STUDENT DIAGNOSTIC REPORT

Your child's scores on the Connecticut Mastery Test are reported inside.

For a description of the Connecticut Mastery Testing Program, see the back cover of this folder.

For general information about your local district's testing program, please contact your superintendent of schools.

For further information on the Connecticut Mastery Testing Program, contact: Connecticut State Department of Education, Student Assessment and Testing, Box 2219, Hartford, Connecticut 06145, (203) 566-4008.

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CONNECTICUT MASTERY TESTING PROGRAM

GRADE 4 REPORT

MATHEMATICS

TEACHER: L R
SCHOOL: B
DISTRICT: B DISTRICT

GRADE: 04
TEST DATE: 10/90
FORM: D

STUDENT OBJECTIVES ANALYSIS FOR

K A

OBJECTIVES TESTED	MASTERY CRITERIA NUMBER CORRECT	STUDENT SCORE
CONCEPTUAL UNDERSTANDINGS		
1. Identify the number one more, one less, ten more or ten less than a given number	3 of 4	4
2. Extend patterns involving numbers and attributes	3 of 4	4
3. Order whole numbers	3 of 4	4
4. Rewrite numbers using expanded notation	3 of 4	4
5. Rewrite numbers by regrouping tens and ones	3 of 4	4
6. Identify fractional parts of regions and sets from pictures for halves, thirds, fourths, and sixths	3 of 4	4
7. Relate multiplication and division facts to rectangular arrays	3 of 4	4
COMPUTATIONAL SKILLS		
8. Know addition and subtraction facts to 18	3 of 4	3
9. Add and subtract one and two digit numbers without regrouping	3 of 4	4
10. Add one and two digit numbers with regrouping	3 of 4	4
11. Estimate sums and differences to 100	3 of 4	1
12. Multiply and divide by 2, 5, and 10	3 of 4	4
PROBLEM SOLVING AND APPLICATIONS		
13. Identify objects or numbers that do or do not belong in a collection, matrix, or array	3 of 4	3
14. Read and interpret bar graphs and pictographs	3 of 4	4
15. Read and interpret data from tables and charts	3 of 4	2
16. Identify or write number sentences from pictures	3 of 4	3
17. Identify number sentences from addition or subtraction story problems	3 of 4	4
18. Solve simple story problems involving addition or subtraction	3 of 4	4
19. Solve and identify number sentences in simple story problems, involving addition and subtraction, with extraneous information	3 of 4	4
20. Identify needed information in problem situations	3 of 4	4
MEASUREMENT AND GEOMETRY		
21. Measure length and identify appropriate units for measuring length and distance	3 of 4	3
22. Estimate lengths and areas	3 of 4	4
23. Tell time to the nearest hour, half hour and quarter hour using analog and digital clocks	3 of 4	4
24. Determine the value of a set of coins	3 of 4	4
25. Identify shapes, angles and sides	3 of 4	4

This student has mastered 23 out of 25 mathematic objectives and correctly answered 91 out of 100 items.

TOTAL NUMBER OF OBJECTIVES MASTERED (out of 25) = 23
NUMBER OF ITEMS CORRECT (out of 100) = 91
(Remedial Standard is 69 of 100 items correct)

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CONNECTICUT MASTERY TESTING PROGRAM

GRADE 4 REPORT

LANGUAGE ARTS

TEACHER: L R
SCHOOL: B
DISTRICT: B DISTRICT

GRADE: 04
TEST DATE: 10/90
FORM: D

STUDENT OBJECTIVES ANALYSIS FOR

K A

OBJECTIVES TESTED	MASTERY CRITERIA NUMBER CORRECT	STUDENT SCORE
WRITING MECHANICS		
1. Capitalization and Punctuation	9 of 12	11
2. Spelling (words, homonyms, and abbreviations)	7 of 9	9
3. Agreement (verb tense, subject-verb, and pronoun referent)	11 of 15	13
LOCATING INFORMATION		
4. Locating Information (schedules, maps, table of contents and title page, and dictionary)	8 of 11	11
LISTENING COMPREHENSION		
5. Literal (understands the meanings of ideas clearly stated by a speaker)	5 of 7	4
6. Inferential and Evaluative (understands the meanings of ideas not clearly stated, but implied, by a speaker and is able to make critical judgments about them)	9 of 13	7
READING COMPREHENSION		
7. Literal (understands the meanings of ideas clearly stated within a passage)	9 of 12	11
8. Inferential (understands the meanings of ideas not stated, but implied, within a passage)	10 of 14	10
9. Evaluative (able to make critical judgments about statements and inferences within a passage)	7 of 10	7
TOTAL NUMBER OF OBJECTIVES MASTERED (out of 9) =		7

WRITING SAMPLE	STUDENT SCORE
Holistic Writing Score (Remedial Standard is 4 of 8)	6
This student has produced material that is generally well organized with supportive detail.	

DEGREES OF READING POWER (DRP)™	STUDENT SCORE
DRP Units (Remedial Standard is 41 DRP Units Reading Goal is 50 DRP Units)	55
This student has scored above the reading goal for beginning fourth graders.	

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PARENT/STUDENT DIAGNOSTIC REPORT

Dear Parent:

Inside you will find the results of the Connecticut Mastery Test administered to your child earlier this fall. The test results help to show you and the school district's professional staff how well your child is performing on those skills identified by the State of Connecticut as important for students entering fourth grade to have mastered.

These tests are designed to determine the specific skill levels of students. The test results will be used to:

- provide your school with information for use in assessing the progress of individual students over time;
- provide your school with information based on which improvements in the general instructional program can be made; and
- provide information on appropriate basic skills remedial assistance for students so indicated.

Mastery testing will occur each fall in grades four, six, and eight for all students and in high school for those students for whom retesting is required.

If you have any questions about these test results, please ask your child's teacher(s). The teacher(s) will share with you other observations and recommendations based on experience in working with your son or daughter during the last several months.

Description of the Test

Mathematics: The mathematics test assesses twenty-five (25) specific objectives in four general areas of: (1) Conceptual Understandings; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. Test items evaluate a student's ability to order and rename numbers; compute and estimate sums and differences; read and interpret tables, graphs, and charts; solve a broad range of problems; measure and estimate length and width; identify shapes; and tell time.

Language Arts: The language arts test covers two general areas: Reading/Listening Comprehension, and Writing/Locating Information. There are nine (9) objectives and two holistic measures, one in reading and one in writing.

The content of Reading/Listening Comprehension consists of narrative, expository, and persuasive passages on a variety of topics measuring a student's reading and listening ability in: (1) Literal Comprehension; (2) Inferential or Interpretive Comprehension; and (3) Evaluative or Critical Comprehension. Audio tapes are used to assess a student's listening comprehension ability. Also used is the "Degrees of Reading Power" (DRP) Test which includes eight (8) passages and fifty-six (56) test items. It is designed to measure a student's ability to understand nonfiction English prose on a graduated scale of reading difficulty.

The content of Writing/Locating Information consists of three components. First, writing skills are directly assessed. A student is asked to write on a designated topic. The writing is judged on the student's demonstrated ability to convey information in a coherent and organized fashion. Second, the test assesses the mechanics of good writing, which are defined as: (1) Capitalization and Punctuation; (2) Spelling (words, homonyms, and abbreviations); and (3) Agreement. Finally, the test assesses Locating Information through the use of schedules, maps, title pages, tables of contents, and dictionaries. This part of the test measures a student's ability to find and use information from listed sources.

APPENDIX H

Fall 1990 Grade Four

State by District Report:

Mathematics

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS										COMPUTATIONAL SKILLS										PROBLEM SOLVING AND APPLICATIONS										MEASUREMENT AND GEOMETRY										TOTAL MATH	
determine 1 & 10 more/less than number		extend patterns		order whole numbers		rewrite #'s using expanded notation		identify fractional parts		relate mult/div facts to pictures		add/subtract facts to 18		add/subtract without regrouping		add with regrouping		estimate sums and differences		multiply and divide by 2, 5, 10		identify objects/numbers in array		read and interpret graphs		read and interpret tables		identify # sentences from pictures		identify # sentences from problems		solve story problems using add/subt		identify needed info in problems		measure length/identify units		estimate length/area		tell time		determine the value of a set of coins		identify shapes/angles/sides		Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis

| DISTRICT | # OF STUDENTS TESTED | T O C | E R G | SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE | | | | | | | | | |

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS							MEASUREMENT AND GEOMETRY							TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	rewrite numbers by regrouping	identify fractional parts	relate mult/div facts to 18	add/subtract facts to pictures	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2,5,10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Percent of Students Needing Further Diagnosis	Average Number of Objectives Mastered	
DISTRICT	# OF STUDENTS TESTED	TOC	ERG	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																								
CROMWELL	136	4	4	97	83	88	95	47	89	69	96	96	90	71	72	88	99	99	83	93	90	80	88	85	81	96	90	99	21.7	8
DANBURY	551	3	6	95	75	87	95	48	89	72	98	96	94	65	82	86	96	92	75	93	89	77	89	77	81	90	89	98	21.3	12
DARIEN	203	2	1	99	93	94	100	66	87	83	97	100	96	73	94	92	98	98	90	99	96	89	95	90	90	96	95	100	23.1	2
DEEP RIVER	47	6	5	100	77	94	100	49	68	70	98	96	91	55	79	85	98	98	87	91	98	87	94	87	87	98	89	98	21.7	6
DERBY	97	5	6	98	81	94	95	47	94	70	99	97	95	55	87	88	98	97	82	95	94	79	93	80	88	93	88	100	21.9	6
EASTFORD	19	6	3	79	58	74	84	42	84	42	100	84	79	26	84	95	95	84	74	84	79	63	68	74	68	68	84	100	18.7	26
EAST GRANBY	52	4	2	100	83	87	98	48	94	71	98	98	100	62	87	92	96	100	92	96	100	88	98	71	90	87	98	98	22.3	2
EAST HADDAM	84	5	4	94	80	95	99	48	90	74	98	99	95	70	87	92	96	96	89	94	92	88	90	90	81	98	92	100	22.3	7
EAST HAMPTON	131	5	3	95	79	82	95	62	79	64	97	94	89	76	79	88	97	92	85	95	90	82	93	84	86	92	93	100	21.7	8
EAST HARTFORD	410	2	6	95	78	87	93	53	90	81	97	97	93	70	85	90	97	94	80	93	91	76	89	79	80	90	90	99	21.7	9
EAST HAVEN	229	2	5	94	86	84	95	55	86	83	98	97	93	72	84	93	96	98	84	97	93	85	92	82	82	96	92	100	22.2	5
EAST LYME	179	4	2	97	81	82	96	60	83	68	96	96	87	55	70	91	94	94	79	96	94	84	93	83	91	93	89	99	21.5	11
EASTON	83	4	1	100	87	95	98	54	93	83	100	100	96	70	84	88	99	94	88	94	95	83	94	90	94	98	96	100	22.7	2
EAST WINDSOR	92	4	5	96	87	76	100	33	84	82	100	100	95	66	88	92	97	96	86	97	91	74	93	83	74	90	95	100	21.7	8
ELLINGTON	142	4	3	99	85	91	97	57	94	76	99	98	92	69	83	92	97	98	88	96	97	86	92	92	85	99	97	99	22.6	1
ENFIELD	485	3	5	97	82	93	96	59	94	78	99	97	94	80	81	91	98	97	82	97	93	81	92	82	86	93	94	100	22.4	5
ESSEX	67	6	4	96	82	88	97	55	81	76	100	99	96	67	97	94	94	99	82	97	97	85	90	94	90	99	97	100	22.5	4
FAIRFIELD	460	2	2	98	92	96	97	62	92	83	99	97	95	76	93	97	99	98	87	97	97	91	94	89	88	97	97	99	23.1	2
FARMINGTON	272	4	2	99	91	96	100	71	94	90	100	98	96	86	93	96	99	98	86	99	98	90	97	93	88	97	98	100	23.5	0
FRANKLIN	25	5	3	100	68	76	100	16	84	72	100	100	92	24	84	72	100	88	80	100	100	64	84	88	84	96	96	96	20.6	4
GLASTONBURY	367	4	2	97	83	95	98	60	84	73	99	97	96	58	84	88	97	96	83	98	94	87	93	83	88	94	96	99	22.2	5
GRANBY	115	4	2	97	95	96	97	63	92	83	99	94	96	74	85	97	97	99	90	98	96	90	97	83	87	98	97	99	23.0	1
GREENWICH	428	2	2	98	90	91	96	62	89	79	97	98	95	74	89	93	97	96	88	96	96	86	96	86	87	96	95	99	22.7	5
GRISWOLD	125	4	6	94	84	80	96	58	68	70	97	94	94	38	82	88	94	96	88	95	92	82	94	65	80	89	94	100	21.1	8
GROTON	512	3	4	92	71	84	95	34	77	65	97	96	92	54	82	84	95	94	80	91	88	77	89	74	78	90	89	98	20.7	13
GUILFORD	290	4	2	98	88	94	99	67	87	77	99	98	96	43	87	94	99	97	90	98	98	90	97	78	86	94	94	100	22.5	3
HAMDEN	409	2	4	95	83	85	94	45	87	73	99	98	90	56	80	87	95	94	79	95	93	77	87	77	81	92	93	98	21.3	10
HAMPTON	13	5	4	100	100	85	100	69	85	77	100	100	100	69	85	100	100	92	85	92	92	85	92	85	92	100	92	100	22.8	0

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS							MEASUREMENT AND GEOMETRY							TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	relate mult/div facts to 18	add/subtract facts to pictures	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis			

| DISTRICT | # OF STUDENTS TESTED | T O C | E R G | SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE | | | | | | |

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS								MEASUREMENT AND GEOMETRY							TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	relate mult/div facts to pictures	add/subtract facts to 19	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis				

| DISTRICT | # OF STUDENTS TESTED | T O C | E R G | SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE | | | | | | | |

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS							MEASUREMENT AND GEOMETRY							TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	relate mult/div facts to pictures	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis	

DISTRICT	# OF STUDENTS TESTED	T O C	E R G	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																							
SOMERS	98	4	3	98	87	96	97	73	90	78	99	98	94	71	85	93	96	92	88	91	94	85	91	80	90	96	99100	22.6	5
SOUTHINGTON	410	3	5	97	83	93	97	51	93	74	98	99	93	74	88	93	97	97	84	97	95	84	94	91	88	95	95 99	22.5	4
SOUTH WINDSOR	308	2	2	95	82	87	94	45	76	74	97	96	95	64	84	90	97	97	85	94	93	82	90	79	83	95	95 99	21.7	7
SPRAGUE	27	4	5	96	78	89	96	41	85	63	100	100	100	74	81	78	96	96	89	100	96	85	96	85	93	89	100 93	22.0	4
STAFFORD	148	5	5	97	84	76	99	47	90	77	97	99	92	61	89	93	95	95	80	93	90	84	91	70	88	95	95 98	21.7	6
STAMFORD	823	1	6	90	67	74	90	38	73	62	97	94	89	41	74	78	90	84	68	90	87	66	77	68	71	84	86 98	19.4	25
STERLING	37	6	5	92	78	81	100	57	86	68	95	95	84	51	68	86	100	95	84	92	86	76	84	78	76	97	95100	21.0	11
STONINGTON	146	4	5	98	86	90	97	64	93	73	97	97	95	73	84	92	97	95	82	95	95	86	96	88	87	95	97 99	22.5	7
STRATFORD	459	2	5	96	83	86	97	59	85	74	96	94	90	49	77	89	96	95	81	95	89	80	88	81	85	92	90100	21.5	10
SUFFIELD	136	4	3	96	85	95	98	78	96	82	92	96	95	80	77	92	99	96	88	96	88	90	90	88	88	94	96100	22.8	4
THOMASTON	90	4	5	96	93	96	96	56	83	70	100	99	94	64	70	94	97	94	77	92	94	74	88	82	86	93	97 99	21.8	3
THOMPSON	119	6	6	94	82	78	96	42	83	73	97	95	91	58	81	87	91	96	82	95	94	81	94	72	87	97	96100	21.4	9
TOLLAND	149	5	3	95	80	91	99	42	83	66	97	97	95	47	88	90	98	99	81	96	95	79	89	89	86	96	95 99	21.7	5
TORRINGTON	349	3	6	96	79	81	96	52	83	76	99	99	96	73	79	87	94	93	80	94	94	78	91	85	84	95	92100	21.8	9
TRUMBULL	364	2	2	99	88	93	99	62	95	79	99	98	95	84	90	94	96	96	83	94	93	87	93	88	86	97	94 99	22.8	4
UNION	7	6	5	100	86	100	100	57	86	86	100	100	100	57	100	86	100	100	100	86	100	100	100	100	100	100	100100	23.4	0
VERNON	309	3	4	96	88	89	98	51	90	72	98	98	93	55	88	94	97	97	84	98	94	83	94	80	85	96	97 99	22.2	4
VOLUNTOWN	31	6	5	97	90	87	87	58	87	65	97	97	87	65	84	87	97	97	84	100	87	90	90	81	87	94	94 97	21.8	10
WALLINGFORD	437	3	5	96	78	83	96	37	75	67	97	99	95	54	79	90	97	95	82	93	93	80	92	77	81	94	93100	21.2	9
WATERBURY	923	1	6	85	50	61	88	19	77	49	95	94	86	29	66	71	92	84	66	87	85	56	73	57	66	82	87 96	18.0	28
WATERFORD	166	4	4	98	70	87	98	36	89	69	96	95	94	61	77	84	98	96	81	93	90	76	89	84	82	92	93 99	21.3	8
WATERTOWN	232	2	5	99	91	93	98	58	87	84	98	99	96	83	87	97	97	98	81	97	97	89	95	83	84	95	95100	22.8	2
WESTBROOK	63	6	4	98	81	76	94	51	90	59	94	86	84	48	59	87	94	89	83	98	84	81	94	81	89	90	90 98	20.8	11
WEST HARTFORD	549	2	2	95	85	90	97	61	87	75	97	96	92	68	83	93	95	96	84	96	94	85	93	85	84	95	95 99	22.2	7
WEST HAVEN	440	2	6	98	91	93	98	69	93	80	98	99	96	75	89	97	97	97	86	98	97	89	95	86	85	95	96100	23.0	3
WESTON	90	5	1	100	89	97	98	58	94	78	99	99	98	73	91	93	100	98	83	99	97	89	94	90	84	97	93100	22.9	1
WESTPORT	218	3	1	99	93	96	99	75	91	88	100	98	94	79	94	97	99	98	90	99	97	93	98	91	88	98	98100	23.5	1
WETHERSFIELD	213	2	3	99	85	92	97	52	91	75	99	97	97	70	86	92	97	98	87	95	95	86	95	92	85	95	95100	22.5	5

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS								PROBLEM SOLVING AND APPLICATIONS								MEASUREMENT AND GEOMETRY								TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	relate mult/div	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	identify # sentences from problems	solve story problems using add/subt	solve story problems with extra info	identify needed info in problems	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis						

| DISTRICT | # OF STUDENTS TESTED | T O C | E R G | SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE | | | | | | | |

CONNECTICUT MASTERY TESTING PROGRAM

STATE BY DISTRICT REPORT

MATHEMATICS GRADE 4

TEST DATE: 10/90

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS							COMPUTATIONAL SKILLS							PROBLEM SOLVING AND APPLICATIONS							MEASUREMENT AND GEOMETRY							TOTAL MATH	
determine 1 & 10 more/less than number	extend patterns	order whole numbers	rewrite #'s using expanded notation	identify fractional parts	relate mult/div facts to 18	add/subtract facts to 18	add/subtract without regrouping	add with regrouping	estimate sums and differences	multiply and divide by 2, 5, 10	identify objects/numbers in array	read and interpret graphs	read and interpret tables	identify # sentences from pictures	solve story problems from pictures	solve story problems using add/subt	identify needed info in problems with extra info	measure length/identify units	estimate length/area	tell time	determine the value of a set of coins	identify shapes/angles/sides	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis				

DISTRICT	# OF STUDENTS TESTED	TOC	ERG	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																											
TOC 1 TOTAL	6271			80	53	63	88	23	68	53	95	94	86	31	65	72	89	80	60	86	83	54	69	58	61	79	86	97	17.8	32
TOC 2 TOTAL	7011			96	86	90	97	58	89	78	98	97	94	69	86	92	97	97	84	96	94	84	93	84	85	94	94	99	22.3	5
TOC 3 TOTAL	8117			94	78	84	95	47	84	71	97	96	92	62	79	88	95	93	78	93	90	76	88	79	81	91	92	98	21.2	11
TOC 4 TOTAL	6528			97	85	90	97	59	87	77	98	98	94	67	84	91	97	96	85	96	94	85	93	85	86	95	95	99	22.3	5
TOC 5 TOTAL	3717			97	85	90	98	58	87	74	97	97	93	67	84	91	97	96	85	96	93	86	94	83	85	95	94	99	22.2	5
TOC 6 TOTAL	2726			96	80	86	96	53	87	72	96	96	92	63	81	90	95	94	82	94	91	82	90	82	84	94	94	99	21.7	8
ERG 1 TOTAL	2058			98	90	92	98	68	91	81	99	98	95	76	91	94	98	97	88	97	96	88	95	89	88	97	96	100	23.0	3
ERG 2 TOTAL	5799			97	87	92	98	62	89	78	98	97	94	69	87	93	97	97	86	96	95	87	94	86	86	96	96	99	22.5	4
ERG 3 TOTAL	3741			97	86	89	97	55	88	75	98	97	94	67	85	91	97	96	86	96	94	85	93	84	87	95	96	99	22.3	5
ERG 4 TOTAL	5210			95	82	88	96	53	87	74	97	97	92	63	82	89	96	95	83	95	92	82	91	81	83	94	94	99	21.8	7
ERG 5 TOTAL	4489			96	81	88	97	51	85	74	98	97	93	64	81	90	97	96	83	95	93	82	92	83	84	94	94	99	21.9	7
ERG 6 TOTAL	8548			92	73	79	93	43	81	68	96	95	91	57	77	84	94	90	75	91	89	72	84	74	77	88	90	98	20.5	15
ERG 7 TOTAL	4525			78	51	61	87	21	65	53	95	94	86	30	63	72	88	79	58	85	82	51	67	56	58	78	86	97	17.4	35
STATE TOTAL	34370			93	77	83	95	49	83	71	97	96	92	59	80	87	95	92	79	93	91	77	87	78	80	91	92	99	21.2	12

APPENDIX I

Fall 1990 Grade Four

State by District Report:

Language Arts

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

DISTRICT	# OF STUDENTS TESTED	TOC	ERG	OBJECTIVES TESTED: WRITING MECHANICS — capitalization and punctuation	WRITING MECHANICS — spelling (words/homonyms/abbreviations)	WRITING MECHANICS — agreement	LOCATING INFORMATION — schedules, maps table of contents dictionary	LISTENING COMPREHENSION — literal	LISTENING COMPREHENSION — inferential and evaluative	READING COMPREHENSION — literal	READING COMPREHENSION — inferential	READING COMPREHENSION — evaluative	TOTAL LANGUAGE ARTS — Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP) — Below 41	41-49	50+	Average DRP Score	% of Students Needing Further Diagnosis	WRITING SAMPLE — 2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																											
ANDOVER	29	4	3	69	55	93	100	76	83	90	83	83	7.3	17	24	59	51	17	3	7	28	7	24	24	7	5.4	10
ANSONIA	167	5	6	71	78	90	95	72	75	77	73	76	7.1	8	31	61	52	8	1	2	17	24	31	12	13	5.7	2
ASHFORD	39	6	4	67	77	79	85	69	38	74	67	44	6.0	21	28	51	49	21	3	3	15	28	33	15	3	5.4	5
AVON	173	4	1	93	84	98	97	84	79	90	88	79	7.9	8	18	74	54	8	0	3	14	23	27	20	13	5.9	3
BARKHAMSTED	52	6	3	87	79	94	98	79	73	85	83	75	7.5	15	23	62	51	15	2	6	27	40	12	6	8	5.0	8
BERLIN	203	4	3	75	79	93	93	83	71	81	76	67	7.2	11	19	70	53	11	1	7	22	25	23	13	8	5.3	9
BETHANY	71	4	2	75	71	89	92	74	69	79	75	72	7.0	24	13	63	50	24	4	15	25	20	14	13	8	5.0	20
BETHEL	221	4	4	83	80	90	93	73	70	79	82	77	7.3	15	17	68	52	15	1	3	20	22	23	22	9	5.7	4
BLOOMFIELD	139	2	4	68	78	85	91	62	55	70	59	50	6.2	30	35	35	45	30	4	5	32	27	20	9	4	5.0	9
BOLTON	71	4	2	84	80	97	97	84	84	87	81	82	7.8	6	21	73	54	6	3	9	19	29	14	12	14	5.4	12
BOZRAH	30	5	3	83	73	90	93	83	70	83	72	66	7.1	24	14	62	50	24	3	7	10	34	34	3	7	5.3	10
BRANFORD	202	4	4	91	80	94	97	73	67	89	80	62	7.3	10	21	69	53	10	2	5	29	24	18	15	9	5.3	7
BRIDGEPORT	1495	1	7	53	65	61	67	41	26	44	39	28	4.3	55	29	16	40	55	10	16	37	24	9	4	1	4.2	26
BRISTOL	618	3	6	69	76	85	89	67	56	75	66	55	6.4	25	25	50	48	25	4	8	24	20	24	13	8	5.2	12
BROOKFIELD	176	4	2	80	75	88	94	73	62	77	78	62	6.9	25	26	49	48	25	2	6	17	27	20	21	8	5.5	8
BROOKLYN	105	6	5	83	76	90	90	76	55	83	75	64	6.9	16	29	55	50	16	2	3	38	15	18	12	11	5.3	5
CANAAN	18	6	4	88	81	94	94	81	56	94	82	41	7.1	19	19	63	51	19	0	0	33	17	22	22	6	5.5	0
CANTERBURY	78	6	3	86	76	91	99	79	67	86	83	79	7.5	8	36	56	51	8	0	9	32	23	24	8	4	5.0	9
CANTON	100	4	2	82	80	93	97	76	80	87	79	80	7.5	14	16	70	53	14	4	3	21	27	24	10	11	5.4	7
CHAPLIN	25	6	5	52	52	60	68	60	44	64	56	52	5.1	48	20	32	42	48	17	17	13	33	13	8	0	4.3	33
CHESHIRE	346	2	2	85	82	95	98	80	74	90	85	83	7.7	11	21	68	53	11	1	5	25	25	22	13	10	5.4	6
CHESTER	54	6	3	85	78	100	100	81	72	91	83	67	7.6	15	20	65	52	15	0	0	10	22	31	25	12	6.1	0
CLINTON	181	5	4	79	78	92	97	79	67	81	76	63	7.1	11	22	67	52	11	0	4	17	24	23	20	12	5.7	4
COLCHESTER	153	5	5	80	77	92	95	79	71	89	83	69	7.3	16	28	56	50	16	1	6	25	23	25	13	7	5.3	7
COLEBROOK	16	6	3	56	50	88	94	63	50	81	69	50	6.0	31	25	44	47	31	6	25	25	25	19	0	0	4.3	31
COLUMBIA	41	5	3	83	61	88	93	78	78	88	73	85	7.3	15	22	63	52	15	0	5	28	35	18	8	8	5.2	5
CORNWALL	12	6	3	75	83	83	100	100	100	83	92	92	8.1	8	8	83	57	8	0	8	17	33	17	17	8	5.4	8
COVENTRY	118	4	3	64	63	86	92	68	57	78	68	57	6.3	21	28	51	49	21	3	9	35	15	17	12	9	5.1	12

SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

DISTRICT	# OF STUDENTS TESTED	TOC	ERG	OBJECTIVES TESTED: WRITING MECHANICS — capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	LOCATING INFORMATION — schedules, maps	table of contents	dictionary	LISTENING COMPREHENSION — literal	inferential and evaluative	READING COMPREHENSION — literal	inferential	evaluative	TOTAL LANGUAGE ARTS — Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP) — Below 41	41-49	50+	Average DRP Score	WRITING SAMPLE — % of Students Needing Further Diagnosis	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																												
				SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																								
CROMWELL	136	4	4	76	75	85	92	69	66	80	72	59	6.7	20	24	57	50	20	0	5	16	25	26	17	10	5.6	5
DANBURY	551	3	6	65	69	79	86	60	51	66	65	55	6.0	37	25	38	45	37	3	8	35	25	17	10	2	4.8	11
DARIEN	199	2	1	87	85	96	99	82	69	89	81	68	7.6	10	21	70	53	10	0	1	13	23	23	24	16	6.1	1
DEEP RIVER	46	6	5	78	76	98	98	85	78	96	80	83	7.7	11	33	57	51	11	0	4	43	17	24	7	4	5.0	4
DERBY	98	5	6	75	74	93	91	73	50	75	71	60	6.6	22	28	49	48	22	0	3	34	25	34	1	3	5.1	3
EASTFORD	20	6	3	65	70	70	80	85	85	58	68	58	6.5	25	30	45	48	25	0	10	55	5	15	15	0	4.7	10
EAST GRANBY	52	4	2	92	73	98	94	79	50	85	81	71	7.2	4	19	77	53	4	0	10	27	23	19	13	8	5.2	10
EAST HADDAM	84	5	4	86	82	89	95	82	77	83	75	69	7.4	13	24	63	51	13	0	7	28	24	20	16	5	5.2	7
EAST HAMPTON	131	5	3	83	70	87	93	74	70	77	74	69	7.0	20	24	56	50	20	1	2	12	35	26	19	5	5.6	3
EAST HARTFORD	410	2	6	69	64	83	90	59	52	69	64	53	6.0	26	29	44	47	26	3	7	30	24	23	8	6	5.0	9
EAST HAVEN	229	2	5	75	77	89	93	70	64	69	67	65	6.7	21	34	45	48	21	3	10	32	27	17	6	5	4.8	13
EAST LYME	179	4	2	71	82	88	92	74	64	77	74	66	6.9	22	14	64	50	22	3	5	26	21	19	19	7	5.3	8
EASTON	83	4	1	72	76	92	92	80	71	88	80	80	7.2	13	19	67	52	13	1	7	25	24	22	12	8	5.3	8
EAST WINDSOR	92	4	5	77	81	95	95	64	54	76	73	71	6.8	14	39	47	49	14	1	4	42	28	13	4	7	4.9	6
ELLINGTON	142	4	3	89	78	95	95	81	61	85	80	56	7.2	11	23	66	53	11	0	1	16	21	18	32	11	6.0	1
ENFIELD	482	3	5	69	74	92	94	68	63	75	69	68	6.7	17	27	56	50	17	2	8	27	28	18	11	7	5.1	10
ESSEX	67	6	4	79	73	91	97	80	67	85	82	67	7.2	18	17	65	51	18	3	3	9	27	26	17	15	5.8	6
FAIRFIELD	458	2	2	84	75	93	95	79	78	86	84	74	7.5	14	19	66	52	14	2	6	28	23	20	15	6	5.2	8
FARMINGTON	273	4	2	89	82	97	97	80	77	84	79	80	7.6	8	16	75	54	8	0	3	13	25	21	22	15	5.9	4
FRANKLIN	25	5	3	76	64	88	100	64	64	72	72	68	6.7	24	24	52	47	24	4	8	28	36	12	8	4	4.8	12
GLASTONBURY	367	4	2	80	77	93	93	74	68	86	80	74	7.3	14	19	67	52	14	1	2	16	19	32	19	12	5.8	3
GRANBY	115	4	2	82	78	92	98	81	76	83	78	77	7.5	10	24	65	53	10	4	8	17	32	17	9	13	5.3	12
GREENWICH	426	2	2	76	80	90	95	75	65	82	77	69	7.1	14	22	64	52	14	1	8	24	22	20	17	7	5.3	9
GRISWOLD	126	4	6	73	74	87	89	71	61	77	68	52	6.5	23	33	44	47	23	4	13	24	25	25	8	2	4.8	17
GROTON	512	3	4	68	65	84	89	67	54	72	63	55	6.2	32	24	44	46	32	7	18	34	20	12	5	3	4.4	25
GUILFORD	290	4	2	85	82	98	97	78	76	89	82	79	7.7	13	20	67	53	13	1	7	21	23	24	18	6	5.4	9
HAMDEN	410	2	4	76	74	85	90	64	54	78	74	67	6.6	24	24	52	48	24	2	5	30	23	20	15	7	5.3	7
HAMPTON	13	5	4	92	85	92	100	54	54	77	69	69	6.9	8	31	62	51	8	0	0	15	31	38	0	15	5.7	0

BEST COPY AVAILABLE

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

DISTRICT	# OF STUDENTS TESTED	T O C	E R G	WRITING MECHANICS: capitalization and punctuation	WRITING MECHANICS: spelling (words/homonyms/abbreviations)	WRITING MECHANICS: agreement	LOCATING INFORMATION: schedules, maps table of contents dictionary	LISTENING COMPREHENSION: literal	LISTENING COMPREHENSION: inferential and evaluative	READING COMPREHENSION: literal	READING COMPREHENSION: inferential	READING COMPREHENSION: evaluative	TOTAL LANGUAGE ARTS: Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP): Below 41	DEGREES OF READING POWER (DRP): 41-49	DEGREES OF READING POWER (DRP): 50+	DEGREES OF READING POWER (DRP): Average DRP Score	DEGREES OF READING POWER (DRP): % of Students Needing Further Diagnosis	WRITING SAMPLE: 2	WRITING SAMPLE: 3	WRITING SAMPLE: 4	WRITING SAMPLE: 5	WRITING SAMPLE: 6	WRITING SAMPLE: 7	WRITING SAMPLE: 8	WRITING SAMPLE: Average Holistic Score	WRITING SAMPLE: % of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																											
HARTFORD	1771	1	7	37	48	48	59	33	23	36	29	20	3.4	69	21	10	36	69	17	18	32	17	11	4	1	4.0	35
HARTLAND	26	6	3	85	92	96	92	77	69	92	88	62	7.5	8	27	65	53	8	0	4	15	23	27	15	15	5.8	4
HEBRON	130	5	2	85	72	97	98	82	78	90	86	87	7.7	12	21	67	52	12	2	4	30	20	22	12	9	5.3	6
KENT	35	6	4	83	69	97	100	91	66	91	77	66	7.4	3	31	66	54	3	0	9	31	14	11	23	11	5.4	9
KILLINGLY	207	6	6	66	65	85	91	69	58	73	61	62	6.3	21	30	49	48	21	5	4	27	25	22	10	7	5.1	9
LEBANON	93	6	4	75	70	91	92	71	70	84	84	63	7.0	15	18	66	52	15	0	3	12	25	24	28	9	5.9	3
LEDYARD	217	4	2	74	72	84	94	76	68	81	75	65	6.9	19	19	61	50	19	2	5	28	24	21	13	7	5.2	7
LISBON	49	4	5	82	65	94	94	67	63	86	80	63	6.9	27	27	47	47	27	0	4	33	18	37	8	0	5.1	4
LITCHFIELD	86	6	3	71	78	83	94	70	70	74	71	59	6.7	15	28	57	51	15	5	5	18	22	26	13	12	5.5	9
MADISON	208	5	2	83	84	92	93	85	80	89	85	63	7.5	9	18	73	54	9	0	2	17	27	25	17	11	5.7	3
MANCHESTER	567	3	4	74	73	86	90	72	67	77	71	70	6.8	20	20	60	51	20	4	10	24	22	19	15	7	5.1	13
MANSFIELD	131	6	4	82	78	93	95	81	67	82	82	79	7.4	17	19	64	53	17	1	3	9	25	23	20	19	6.0	4
MARLBOROUGH	68	5	2	90	76	91	97	81	72	94	84	84	7.7	10	18	72	54	10	0	6	25	13	25	22	9	5.6	6
MERIDEN	610	3	6	49	63	70	77	50	42	57	51	45	5.1	35	28	37	45	35	4	9	26	26	20	11	4	5.0	13
MIDDLETOWN	326	3	6	68	71	84	86	63	53	73	68	58	6.2	27	30	43	47	27	1	7	34	24	26	5	2	4.9	9
MILFORD	451	3	4	82	71	88	93	70	68	76	67	66	6.8	22	29	49	48	22	2	10	26	26	19	13	4	5.1	12
MONROE	231	4	2	85	77	93	97	78	80	79	77	73	7.4	16	19	65	52	16	1	2	13	21	39	16	7	5.7	3
MONTVILLE	203	4	5	79	74	88	93	63	46	72	67	60	6.4	26	29	45	47	26	6	10	28	21	15	12	7	5.0	16
NAUGATUCK	354	2	6	80	72	91	94	68	59	75	67	63	6.7	23	28	49	49	23	1	10	34	20	21	10	4	5.0	11
NEW BRITAIN	613	3	6	55	62	69	77	51	37	55	51	41	5.0	45	24	31	41	45	12	14	36	21	10	5	2	4.3	26
NEW CANAAN	191	2	1	81	71	91	97	81	72	86	81	71	7.3	15	17	68	52	15	2	4	14	26	22	22	11	5.7	6
NEW FAIRFIELD	199	4	2	81	77	91	92	75	55	83	72	55	6.8	22	24	55	49	22	4	4	24	22	24	15	7	5.3	8
NEW HARTFORD	73	5	3	82	79	89	93	81	73	78	77	68	7.2	16	34	49	50	16	1	4	31	24	24	11	6	5.2	6
NEW HAVEN	1260	1	7	45	62	63	67	42	33	49	44	39	4.5	60	22	18	39	60	10	14	35	23	11	4	2	4.3	24
NEWINGTON	283	2	3	86	82	96	99	76	72	87	79	62	7.4	9	18	73	54	9	0	5	28	35	20	8	4	5.1	5
NEW LONDON	242	3	6	59	59	75	81	54	50	58	51	43	5.3	51	23	26	41	51	11	12	41	16	12	5	3	4.3	23
NEW MILFORD	306	5	4	78	72	92	95	70	61	81	78	72	7.0	22	27	51	49	22	1	1	14	22	26	24	12	5.9	3
NEWTOWN	281	5	2	83	75	93	96	77	71	85	83	74	7.4	13	23	64	51	13	1	4	28	27	25	10	5	5.2	5

SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

	OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE										
	WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION																		
	capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41	41-49	50+	Average DRP Score	% of Students Needing Further Diagnosis	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																									
DISTRICT	# OF STUDENTS TESTED	T O C	E R G	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																					
NORFOLK	25	6	4	80	76	92	92	76	56	84	76	56	6.9	12	32	56	50	12	0	16	36	36	8	4	0	4.5	16
NORTH BRANFORD	186	4	3	77	85	94	97	73	59	77	76	60	7.0	16	22	62	51	16	1	7	24	25	22	14	7	5.3	8
NORTH CANAAN	42	6	4	69	62	88	90	67	64	88	79	71	6.8	21	24	55	49	21	5	5	17	17	36	17	5	5.4	10
NORTH HAVEN	220	2	3	74	73	94	92	74	67	83	73	68	7.0	16	29	55	50	16	0	5	26	24	28	11	5	5.3	5
NORTH STONINGTON	59	5	3	81	83	93	97	92	81	95	85	86	7.9	8	22	69	53	8	0	2	25	27	22	22	2	5.4	2
NORWALK	671	3	6	68	72	76	81	59	51	64	60	50	5.8	41	23	37	44	41	7	15	33	19	14	7	5	4.6	21
NORWICH	381	3	6	79	72	91	91	69	61	75	70	60	6.7	24	24	52	48	24	2	7	27	28	19	10	6	5.1	9
OLD SAYBROOK	113	5	4	75	71	89	93	75	68	79	79	68	7.0	16	25	59	51	16	5	6	24	27	23	9	5	5.0	12
ORANGE	164	2	1	88	75	90	90	77	71	81	73	66	7.1	18	17	65	51	18	1	7	36	26	15	12	3	5.0	8
OXFORD	141	5	3	76	79	89	89	76	62	83	77	66	7.0	18	24	58	50	18	1	4	21	30	28	11	4	5.3	5
PLAINFIELD	182	6	6	64	61	77	83	55	55	65	54	57	5.7	34	34	32	44	34	8	8	36	25	14	7	1	4.5	16
PLAINVILLE	184	4	5	73	75	86	93	66	55	74	70	64	6.6	20	28	52	48	20	4	3	33	24	20	7	9	5.1	8
PLYMOUTH	127	2	5	83	71	90	94	64	66	80	70	71	6.9	13	24	63	52	13	2	11	28	23	17	14	6	5.1	12
POMFRET	43	6	4	67	71	86	95	62	60	70	72	65	6.5	29	24	48	48	29	0	19	14	19	21	16	12	5.4	19
PORTLAND	83	5	4	55	67	86	87	70	63	73	74	55	6.4	28	31	41	46	28	5	11	23	16	20	18	7	5.2	16
PRESTON	48	4	5	71	81	98	96	79	63	90	83	60	7.2	17	23	60	50	17	6	10	35	15	21	2	10	4.8	17
PUTNAM	95	6	6	64	73	82	88	61	56	72	62	52	6.1	29	32	39	46	29	22	13	22	23	10	7	2	4.2	35
REDDING	103	5	1	73	80	89	90	82	67	79	72	69	7.0	26	19	55	49	26	1	6	25	25	21	17	7	5.4	7
RIDGEFIELD	257	5	1	88	86	95	99	81	79	90	87	79	7.8	9	15	76	54	9	0	1	12	21	35	21	10	5.9	1
ROCKY HILL	148	4	4	84	80	91	94	79	77	80	74	70	7.3	18	23	59	51	18	1	4	18	19	25	15	16	5.7	5
SALEM	68	5	4	76	65	91	88	78	62	82	76	65	6.8	21	21	59	51	21	4	7	32	19	26	9	1	4.9	12
SALISBURY	49	6	4	65	65	84	86	78	57	80	71	61	6.5	35	14	51	47	35	8	6	31	27	12	6	10	4.9	14
SCOTLAND	22	6	5	68	73	91	91	68	32	91	73	41	6.3	27	18	55	49	27	0	24	24	29	19	5	0	4.6	24
SEYMOUR	159	5	5	82	84	92	95	75	72	77	70	69	7.2	14	27	58	50	14	3	6	35	24	20	7	4	4.9	9
SHARON	23	6	4	78	70	83	96	74	61	83	78	52	6.7	26	26	48	47	26	0	4	9	17	48	17	4	5.8	4
SHELTON	359	3	3	79	82	89	94	67	60	75	70	68	6.8	21	26	53	49	21	1	4	24	27	24	15	6	5.4	4
SHERMAN	30	6	2	73	70	97	97	87	90	77	73	50	7.1	23	13	63	51	23	3	7	23	7	30	13	17	5.6	10
SIMSBURY	281	4	1	81	80	95	96	81	73	91	84	84	7.7	9	20	72	54	9	0	2	20	24	26	15	14	5.7	2

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

DISTRICT	# OF STUDENTS TESTED	TOC	ERG	OBJECTIVES TESTED: WRITING MECHANICS — capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	LOCATING INFORMATION — schedules, maps table of contents dictionary	LISTENING COMPREHENSION — literal	inferential and evaluative	READING COMPREHENSION — literal	inferential	evaluative	TOTAL LANGUAGE ARTS — Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP) — Below 41	41-49	50+	Average DRP Score	WRITING SAMPLE — % of Students Needing Further Diagnosis	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																										
SOMERS	98	4	3	81	78	89	92	80	61	81	80	54	6.9	21	15	63	50	21	1	6	23	20	15	28	7	5.5	7
SOUTHINGTON	409	3	5	80	70	90	94	74	66	79	72	68	6.9	18	29	52	49	18	0	2	11	24	29	23	11	5.9	2
SOUTH WINDSOR	308	2	2	78	70	91	95	76	64	76	74	59	6.8	19	21	60	51	19	1	6	22	19	24	19	9	5.5	7
SPRAGUE	27	4	5	81	67	85	81	89	59	70	63	48	6.4	26	30	44	47	26	19	19	33	11	7	4	7	4.1	37
STAFFORD	145	5	5	61	74	86	94	66	59	77	73	72	6.6	29	26	45	47	29	1	9	27	19	22	14	10	5.3	9
STAMFORD	824	1	6	54	65	71	75	50	41	57	53	48	5.2	41	25	34	43	41	9	12	30	21	16	8	4	4.6	21
STERLING	37	6	5	73	62	84	81	65	43	65	57	46	5.8	41	30	30	43	41	0	19	30	24	11	16	0	4.8	19
STONINGTON	146	4	5	77	65	90	92	74	55	76	74	54	6.6	21	18	61	50	21	3	6	26	27	13	17	8	5.3	8
STRATFORD	459	2	5	76	78	90	91	72	59	72	65	64	6.7	20	24	56	50	20	3	11	31	22	15	12	6	4.9	14
SUFFIELD	136	4	3	81	75	96	95	71	57	81	81	65	7.0	19	34	47	49	19	1	4	28	24	21	13	9	5.3	5
THOMASTON	89	4	5	81	83	91	90	69	57	78	66	61	6.8	19	28	53	48	19	1	1	24	24	24	11	15	5.6	2
THOMPSON	120	6	6	63	67	85	91	66	65	74	71	55	6.4	25	28	47	47	25	5	11	33	22	14	12	3	4.8	16
TOLLAND	149	5	3	77	81	91	90	77	70	81	76	68	7.1	11	24	65	52	11	3	1	14	23	26	23	9	5.7	5
TORRINGTON	339	3	6	74	67	86	92	69	59	72	68	50	6.4	23	26	51	49	23	1	10	29	25	17	12	5	5.0	11
TRUMBULL	363	2	2	85	83	91	93	76	71	83	82	70	7.3	11	17	72	53	11	1	2	19	28	23	23	5	5.6	2
UNION	7	6	5	86	86	86	100	86	100	100	86	100	8.3	0	14	86	58	0	0	0	43	14	29	14	0	5.1	0
VERNON	308	3	4	87	87	96	97	73	65	83	75	64	7.3	14	25	61	51	14	1	2	21	22	26	16	12	5.6	3
VOLUNTOWN	31	6	5	81	55	87	97	71	55	77	77	55	6.5	29	29	42	46	29	0	0	35	26	26	13	0	5.2	0
WALLINGFORD	439	3	5	66	76	89	94	74	66	76	72	67	6.8	25	26	49	48	25	2	3	32	26	22	10	6	5.2	5
WATERBURY	923	1	6	53	63	70	76	46	31	51	45	34	4.7	46	27	28	42	46	5	13	40	22	14	5	1	4.4	18
WATERFORD	166	4	4	76	77	93	94	78	60	80	73	63	6.9	19	22	58	50	19	1	8	27	25	22	10	6	5.1	10
WATERTOWN	231	2	5	83	77	94	95	72	62	83	77	64	7.1	13	27	60	51	13	1	7	25	25	23	15	4	5.2	9
WESTBROOK	63	6	4	76	73	89	100	75	56	83	73	57	6.8	17	32	51	49	17	2	2	29	16	35	10	8	5.4	3
WEST HARTFORD	546	2	2	75	72	89	94	77	69	79	77	59	6.9	17	19	64	52	17	2	4	20	21	26	15	13	5.6	6
WEST HAVEN	439	2	6	72	74	92	94	71	58	82	72	62	6.8	15	30	54	50	15	1	3	31	23	26	10	6	5.3	3
WESTON	91	5	1	91	80	95	97	85	85	93	87	74	7.9	9	19	72	54	9	1	0	21	18	24	18	18	5.9	1
WESTPORT	219	3	1	81	83	95	97	82	66	94	92	76	7.7	3	14	83	58	3	1	5	28	22	23	11	9	5.3	5
WETHERSFIELD	213	2	3	85	80	92	95	73	66	80	77	63	7.1	14	20	66	53	14	0	7	31	22	21	12	7	5.2	8

SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 4

TEST DATE: 10/90

DISTRICT	# OF STUDENTS TESTED	TOC	ERG	WRITING MECHANICS: Capitalization and punctuation	WRITING MECHANICS: Spelling (words/homonyms/abbreviations)	WRITING MECHANICS: Agreement	LOCATING INFORMATION: Schedules, maps table of contents dictionary	LISTENING COMPREHENSION: Literal	LISTENING COMPREHENSION: Inferential and evaluative	READING COMPREHENSION: Literal	READING COMPREHENSION: Inferential	READING COMPREHENSION: Evaluative	TOTAL LANGUAGE ARTS: Average Number of Objectives Mastered	DEGREES OF READING POWER (DRP): Below 41	DEGREES OF READING POWER (DRP): 41-49	DEGREES OF READING POWER (DRP): 50+	DEGREES OF READING POWER (DRP): Average DRP Score	DEGREES OF READING POWER (DRP): % of Students Needing Further Diagnosis	WRITING SAMPLE: 2	WRITING SAMPLE: 3	WRITING SAMPLE: 4	WRITING SAMPLE: 5	WRITING SAMPLE: 6	WRITING SAMPLE: 7	WRITING SAMPLE: 8	WRITING SAMPLE: Average Holistic Score	WRITING SAMPLE: % of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																											
WILLINGTON	56	5	4	80	67	85	94	65	70	78	74	70	6.8	20	22	57	50	20	0	7	27	13	25	20	9	5.5	7
WILTON	212	4	1	83	82	92	94	82	80	89	83	72	7.6	14	17	70	53	14	0	3	12	22	29	20	14	5.9	3
WINCHESTER	133	6	5	66	64	85	89	66	54	66	62	58	6.1	36	32	32	45	36	8	14	38	16	14	8	4	4.5	21
WINDHAM	239	6	6	55	59	69	82	56	44	62	55	44	5.3	49	19	32	42	49	12	13	31	20	12	8	3	4.4	26
WINDSOR	338	2	4	70	72	88	91	69	53	71	68	56	6.4	31	26	43	46	31	3	14	25	19	20	13	7	5.1	17
WINDSOR LOCKS	113	4	5	80	76	92	96	81	58	88	78	67	7.2	5	21	73	53	5	1	4	21	15	31	19	9	5.6	5
WOLCOTT	147	2	5	86	70	95	96	71	60	82	78	66	7.0	15	24	61	51	15	1	5	14	27	21	25	8	5.7	6
WOODBRIDGE	82	4	1	70	72	88	90	73	54	79	72	67	6.6	19	20	62	51	19	2	2	30	35	12	10	9	5.2	5
WOODSTOCK	86	6	3	74	60	85	92	76	64	78	66	65	6.6	30	30	40	46	30	2	3	50	19	15	9	1	4.7	6
REG. DIST. NO. 06	72	6	4	81	72	93	94	71	60	80	69	56	6.7	21	21	58	49	21	0	1	17	29	28	18	7	5.7	1
REG. DIST. NO. 10	167	5	3	77	72	95	95	75	60	86	79	66	7.1	11	23	66	53	11	1	5	19	26	23	19	7	5.5	7
REG. DIST. NO. 12	81	6	2	80	77	90	94	80	80	81	84	64	7.3	12	31	57	51	12	0	0	19	33	18	26	5	5.7	0
REG. DIST. NO. 13	131	5	3	78	72	84	94	79	63	81	70	57	6.8	18	28	53	49	18	3	5	26	22	28	9	7	5.2	8
REG. DIST. NO. 14	111	4	2	75	83	92	95	82	70	76	70	59	7.0	13	25	62	52	13	2	6	34	20	21	11	6	5.1	8
REG. DIST. NO. 15	233	4	3	87	78	99	97	78	79	91	87	68	7.6	12	18	70	53	12	0	3	16	32	26	15	7	5.5	4
REG. DIST. NO. 16	146	4	5	77	66	86	88	70	66	73	69	64	6.6	18	23	59	49	18	5	7	32	21	21	10	3	4.9	12
REG. DIST. NO. 17	133	6	3	87	83	97	96	78	67	81	81	53	7.2	8	16	76	54	8	1	3	14	26	26	18	12	5.8	4
REG. DIST. NO. 18	89	6	2	76	73	95	98	77	63	88	83	72	7.2	16	20	64	52	16	3	8	29	24	21	7	8	5.0	11

STATE BY DISTRICT REPORT

LANGUAGE ARTS
GRADE 4

TEST DATE: 10/90

				OBJECTIVES TESTED									TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE									
				WRITING MECHANICS			LOCATING INFORMATION	LISTENING COMPREHENSION		READING COMPREHENSION															
				capitalization and punctuation	spelling (words/homonyms/abbreviations)	agreement	schedules, maps table of contents dictionary	literal	inferential and evaluative	literal	inferential	evaluative	Average Number of Objectives Mastered	Below 41	41-49	50+	Average DRP Score	% of Students Needing Further Diagnosis	1	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																											
DISTRICT	# OF STUDENTS TESTED	T O C	E R G	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																							
TOC 1 TOTAL	6273			47	59	60	67	41	29	46	40	31	4.2	57	24	19	40	57	11	15	35	21	12	4	2	4.3	26
TOC 2 TOTAL	7080			78	75	91	94	73	64	79	74	65	6.9	18	24	59	51	18	2	6	26	24	21	14	7	5.3	8
TOC 3 TOTAL	8097			69	71	83	88	65	56	71	66	58	6.3	28	25	47	47	28	4	9	29	23	19	11	6	5.0	13
TOC 4 TOTAL	6524			80	77	92	94	76	67	82	77	68	7.1	16	21	63	51	16	2	5	22	23	23	15	9	5.4	7
TOC 5 TOTAL	3711			79	77	91	94	77	69	83	78	70	7.2	15	24	61	51	15	1	4	22	24	26	15	8	5.5	5
TOC 6 TOTAL	2712			72	70	86	91	71	61	77	71	60	6.6	24	26	51	48	24	4	7	26	23	20	13	7	5.1	11
ERG 1 TOTAL	2055			83	80	93	96	81	73	88	83	75	7.5	11	18	71	53	11	1	3	19	24	25	17	11	5.7	4
ERG 2 TOTAL	5786			81	77	92	95	77	71	83	79	70	7.3	15	20	65	52	15	2	5	22	23	24	16	9	5.5	6
ERG 3 TOTAL	3730			80	77	92	94	76	67	82	77	65	7.1	15	24	61	51	15	1	5	24	26	23	15	7	5.4	6
ERG 4 TOTAL	5202			77	74	89	93	71	63	78	73	64	6.8	21	24	55	49	21	3	8	24	22	21	15	8	5.3	10
ERG 5 TOTAL	4483			75	74	90	93	71	61	77	71	65	6.8	20	27	53	49	20	2	7	28	24	20	12	7	5.2	9
ERG 6 TOTAL	8535			63	68	79	84	59	49	65	60	50	5.8	34	26	40	45	34	5	10	32	23	18	8	4	4.8	15
ERG 7 TOTAL	4526			44	58	56	64	38	27	42	37	28	4.0	62	24	14	38	62	13	16	35	21	10	4	1	4.2	29
STATE TOTAL	34317			71	71	83	88	66	57	72	67	58	6.3	27	24	49	48	27	4	8	27	23	20	12	6	5.1	12

APPENDIX J

Grade Four Connecticut Mastery Test

Percent of Students Meeting the Statewide Goal

In Each Content Area

By District

Grade Four Connecticut Mastery Test
Percent of Students Meeting the Statewide Goal *
In Each Content Area By District

DISTRICT	READING	WRITING	MATH
ANDOVER	59	31	86
ANSONIA	60	25	77
ASHFORD	51	18	74
AVON	74	33	90
BARKHAMSTED	60	13	72
BERLIN	70	21	78
BETHANY	63	21	73
BETHEL	67	30	69
BLOOMFIELD	35	12	71
BOLTON	69	25	79
BOZRAH	56	9	53
BRANFORD	69	23	75
BRIDGEPORT	16	4	26
BRISTOL	50	20	59
BROOKFIELD	49	29	66
BROOKLYN	55	24	74
CANAAN	56	28	72
CANTERBURY	55	11	81
CANTON	70	21	78
CHAPLIN	32	8	44
CHESHIRE	67	22	73
CHESTER	64	35	69
CLINTON	66	32	72
COLCHESTER	56	20	58
COLEBROOK	44	0	38
COLUMBIA	60	14	81
CORNWALL	83	25	92
COVENTRY	51	21	60
CROMWELL	57	27	65
DANBURY	37	12	60
DARIEN	68	39	82
DEEP RIVER	55	11	62
DERBY	47	4	66
EASTFORD	45	15	40
EAST GRANBY	77	21	71
EAST HADDAM	63	20	75
EAST HAMPTON	56	24	66
EAST HARTFORD	44	13	65
EAST HAVEN	45	11	69
EAST LYME	64	26	64
EASTON	67	20	78
EAST WINDSOR	47	11	64
ELLINGTON	66	43	71
ENFIELD	55	17	73
ESSEX	64	31	73
FAIRFIELD	66	20	82
FARMINGTON	75	36	85
FRANKLIN	52	12	48
GLASTONBURY	67	31	69

* READING GOAL = 50 DRP UNITS WITH 70% COMPREHENSION
WRITING GOAL = HOLISTIC SCORE OF 7 ON A SCALE OF 2 TO 8
MATH GOAL = 22 OF 25 OBJECTIVES MASTERED

Grade Four Connecticut Mastery Test
Percent of Students Meeting the Statewide Goal *
In Each Content Area By District

DISTRICT	READING	WRITING	MATH
GRANBY	65	22	77
GREENWICH	63	24	78
GRISWOLD	44	10	55
GROTON	44	8	53
GUILFORD	66	23	74
HAMDEN	52	20	60
HAMPTON	62	15	77
HARTFORD	10	4	18
HARTLAND	65	31	73
HEBRON	67	22	79
KENT	66	34	86
KILLINGLY	47	17	64
LEBANON	66	37	75
LEDYARD	61	20	65
LISBON	47	8	69
LITCHFIELD	56	24	67
MADISON	73	27	75
MANCHESTER	59	21	78
MANSFIELD	64	39	73
MARLBOROUGH	71	30	86
MERIDEN	37	15	52
MIDDLETOWN	43	7	56
MILFORD	49	17	61
MONROE	65	23	83
MONTVILLE	45	20	59
NAUGATUCK	49	14	71
NEW BRITAIN	31	7	53
NEW CANAAN	68	32	78
NEW FAIRFIELD	54	21	63
NEW HARTFORD	49	16	67
NEW HAVEN	17	6	32
NEWINGTON	73	12	83
NEW LONDON	26	8	34
NEW MILFORD	51	35	66
NEWTOWN	64	15	73
NORFOLK	56	4	80
NORTH BRANFORD	62	20	66
NORTH CANAAN	51	20	58
NORTH HAVEN	55	16	64
NORTH STONINGTON	69	24	75
NORWALK	36	11	48
NORWICH	51	16	57
OLD SAYBROOK	58	13	72
ORANGE	65	15	68
OXFORD	58	15	66
PLAINFIELD	32	8	61
PLAINVILLE	51	16	62
PLYMOUTH	62	19	82
POMFRET	47	28	65

* READING GOAL - 50 DRP UNITS WITH 70% COMPREHENSION
WRITING GOAL - HOLISTIC SCORE OF 7 ON A SCALE OF 2 TO 8
MATH GOAL - 22 OF 25 OBJECTIVES MASTERED

Grade Four Connecticut Mastery Test
Percent of Students Meeting the Statewide Goal *
In Each Content Area By District

DISTRICT	READING	WRITING	MATH
PORTLAND	41	25	57
PRESTON	58	13	60
PUTNAM	39	9	67
REDDING	54	23	62
RIDGEFIELD	76	32	87
ROCKY HILL	57	31	74
SALEM	59	10	56
SALISBURY	50	16	44
SCOTLAND	55	5	64
SEYMOUR	58	11	58
SHARON	48	22	43
SHELTON	52	20	65
SHERMAN	63	30	77
SIMSBURY	71	28	82
SOMERS	63	35	76
SOUTHINGTON	52	33	72
SOUTH WINDSOR	60	28	67
SPRAGUE	44	11	63
STAFFORD	44	22	65
STAMFORD	34	12	46
STERLING	30	16	57
STONINGTON	61	25	79
STRATFORD	55	17	64
SUFFIELD	47	22	79
THOMASTON	52	26	63
THOMPSON	47	15	58
TOLLAND	65	32	63
TORRINGTON	50	17	67
TRUMBULL	72	28	78
UNION	86	14	86
VERNON	61	28	70
VOLUNTOWN	42	13	71
WALLINGFORD	49	15	60
WATERBURY	28	5	29
WATERFORD	58	16	57
WATERTOWN	59	19	77
WESTBROOK	51	17	54
WEST HARTFORD	63	27	71
WEST HAVEN	54	16	79
WESTON	70	35	80
WESTPORT	83	21	86
WETHERSFIELD	66	19	74
WILLINGTON	55	29	71
WILTON	70	33	82
WINCHESTER	32	11	49
WINDHAM	32	10	58
WINDSOR	43	20	58
WINDSOR LOCKS	73	27	76
WOLCOTT	61	32	69

* READING GOAL = 50 DRP UNITS WITH 70% COMPREHENSION
WRITING GOAL = HOLISTIC SCORE OF 7 ON A SCALE OF 2 TO 8
MATH GOAL = 22 OF 25 OBJECTIVES MASTERED

Grade Four Connecticut Mastery Test
Percent of Students Meeting the Statewide Goal *
In Each Content Area By District

DISTRICT	READING	WRITING	MATH
WOODBRIDGE	61	18	76
WOODSTOCK	40	10	55
REGIONAL DIST 6	58	25	65
REGIONAL DIST 10	65	26	79
REGIONAL DIST 12	57	31	74
REGIONAL DIST 13	53	16	65
REGIONAL DIST 14	62	17	67
REGIONAL DIST 15	70	22	84
REGIONAL DIST 16	59	14	62
REGIONAL DIST 17	76	30	82
REGIONAL DIST 18	62	14	84

* READING GOAL = 50 DRP UNITS WITH 70% COMPREHENSION
WRITING GOAL = HOLISTIC SCORE OF 7 ON A SCALE OF 2 TO 8
MATH GOAL = 22 OF 25 OBJECTIVES MASTERED

Grade Four Connecticut Mastery Test
Percent of Students Meeting the Statewide Goal *
In Each Content Area By TOC

	READING	WRITING	MATH
TOC 1 TOTAL	19	6	28
TOC 2 TOTAL	59	21	72
TOC 3 TOTAL	47	16	61
TOC 4 TOTAL	63	24	72
TOC 5 TOTAL	60	23	70
TOC 6 TOTAL	51	19	66
ERG 1 TOTAL	71	29	81
ERG 2 TOTAL	65	25	74
ERG 3 TOTAL	61	21	71
ERG 4 TOTAL	55	22	66
ERG 5 TOTAL	53	19	67
ERG 6 TOTAL	40	12	55
ERG 7 TOTAL	14	5	25
STATE TOTAL	49	18	61

* READING GOAL = 50 DRP UNITS WITH 70% COMPREHENSION
WRITING GOAL = HOLISTIC SCORE OF 7 ON A SCALE OF 2 TO 8
MATH GOAL = 22 OF 25 OBJECTIVES MASTERED

APPENDIX K

Type of Community Classifications

Type of Community

TOC 1 = LARGE CITY - a town with a population of more than 100,000.

TOC 2 = FRINGE CITY - a town contiguous with a large city and with a population over 10,000.

TOC 3 = MEDIUM CITY - a town with a population between 25,000 and 100,000 and not a Fringe City.

TOC 4 = SMALL TOWN (Suburban) - a town within an SMSA* with a population of less than 25,000, not a Fringe City.

TOC 5 = SMALL TOWN (Emerging Suburban) - a town with a population of less than 25,000 included in what was a proposed 1980 SMSA but not included in a 1970 SMSA.

TOC 6 = SMALL TOWN (Rural) - a town not included in an SMSA, with a population of less than 25,000.

*Standard Metropolitan Statistical Area

APPENDIX L

Education Reference Group Descriptions

Education Reference Group Descriptions

The education reference groups were formed from an analysis of districts' median family income, a percentage of high school graduates, a percentage of those in managerial/professional occupations, a percentage of single-parent families, a percentage of those below poverty and a percentage of non-English home language from the 1980 census. The groups have not been named, but have been labeled I through VII. Note, however, that the groups run from extremely affluent suburban communities (I) to our three largest cities of Hartford, Bridgeport and New Haven (VII). Some differ widely with respect to all of the family background variables; others differ slightly with respect to one or two. In addition to the six variables used to classify districts, the group descriptions below also include superintendents' comments that were provided in a Department survey in 1988.

Group I. These 13 districts were wealthy, professional suburbs. The median family income in 1979 averaged $40,425. Residents were extremely well educated. Nearly 90% had at least a high school diploma, 42% had a bachelor's degree and 49% had a managerial or professional job. There were relatively few children with educational disadvantages here. Only 7% of the families were single-parent, about 8% spoke a language other than English at home and almost no one (2%) lived in poverty. Superintendents within these towns used the adjectives "suburban," "affluent," "growing" and "bedroom community" to describe them.

Group II. Residents in the 29 districts of Group II were affluent, well-educated professionals, but to a lesser extent than residents of Group I. The median family income averaged $28,113, more than 83% of the residents had high school diplomas, 29% had a college degree and 36% had a managerial or professional job. Like Group I, this group had a low percentage of people who spoke another language at home (8%), almost no one in poverty (2%) and relatively few single-parent families (9%). Like the superintendents in Group I, superintendents from these towns described their communities as "affluent," "bedroom communities," "growing" and "suburban."

Group III. These 34 districts were mostly rural bedroom communities. Like Groups I and II, these towns did not have many disadvantaged children. There were only 7% who spoke a language other than English at home, only 7% who were from single-parent families and only 3% who were poor. Adults were slightly less affluent (median family income of $24,431), less likely to have a high school diploma (77%) and less likely to have a managerial or professional job (28%) than people in Group II. Like the previous two groups, these towns were described by superintendents as "suburban," "growing" and "bedroom communities." Several superintendents used "rural" and "middle class" (as well as "affluent") to describe their communities.

Group IV. This group of 37 districts was probably the most diverse set of towns, containing a number of coastal and resort communities, as well as rural and suburban areas. Group IV was similiar to Group III in median family income ($22,609), percentage of high school graduates (77%), percentage of managers/professionals (29%) and percentage of non-English home language (7%), but had a significantly higher percentage of single-parent families (12% versus 7%) and a slightly higher percentage of families below poverty (5% versus 3%). Superintendents' descriptions reflect this group's diversity. They describe their towns as "bedroom," "growing," "rural," "suburban," "middle income" and "affluent."

Group V. These 30 districts made up the first group of working class/blue collar communities. This group had a significantly lower percentage of high school graduates (68%) and percentage of managers/professionals (19%) than Group IV. Other characteristics were similar to Group IV: the average income was $21,920, there were 11% single-parent families, 5% below poverty and 9% of the population spoke a language other than English at home.

Group VI. This group of 23 districts included the state's medium-sized cities, the larger cities of Stamford and Waterbury, several former mill towns and some densely populated blue collar suburbs. Group VI had similar socioeconomic characteristics as Group V, but significantly greater proportions of single-parent families and families in which English was not the primary home language. The median family income of $20,325 was below the state average. An average of 16% of the residents spoke another language at home and 17% of the families were headed by single parents. Only 63% of the residents had high school diplomas, and 6% lived below poverty level.

Group VII. Hartford, Bridgeport and New Haven were vastly different from other communities in Connecticut. An average of 28% of the families spoke a language other than English, 46% were headed by single parents, 20% lived in poverty and the median family income was $15,240.

APPENDIX M

Student Participation Rates

PARTICIPATION RATES FOR FOURTH GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1990-1991

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
ANDOVER	30	29	3.3	100.0	100.0	100.0	100.0
ANSONIA	180	167	7.2	99.4	98.8	99.4	99.4
ASHFORD	49	39	20.4	100.0	100.0	100.0	100.0
AVON	174	173	.6	100.0	100.0	100.0	100.0
BARKHAMSTED	55	53	3.6	100.0	98.1	98.1	98.1
BERLIN	207	203	1.9	100.0	100.0	99.5	100.0
BETHANY	71	71	.0	100.0	100.0	100.0	100.0
BETHEL	228	223	2.2	99.6	99.1	97.8	98.7
BLOOMFIELD	150	139	7.3	100.0	100.0	97.8	100.0
BOLTON	76	71	6.6	100.0	98.6	97.2	94.4
BOZRAH	35	32	8.6	100.0	93.8	90.6	90.6
BRANFORD	215	203	5.6	99.5	99.5	98.5	99.5
BRIDGEPORT	1,646	1,506	8.5	99.5	98.5	96.3	98.5
BRISTOL	644	619	3.9	99.8	99.7	98.2	99.7
BROOKFIELD	176	176	.0	100.0	100.0	98.3	100.0
BROOKLYN	110	105	4.5	100.0	100.0	100.0	100.0
CANAAN	20	18	10.0	100.0	100.0	100.0	88.9
CANTERBURY	84	80	4.8	100.0	97.5	97.5	97.5
CANTON	103	100	2.9	100.0	100.0	100.0	100.0
CHAPLIN	27	25	7.4	100.0	100.0	96.0	100.0
CHESHIRE	357	348	2.5	99.7	99.1	98.3	99.1
CHESTER	56	55	1.8	100.0	98.2	92.7	98.2
CLINTON	199	182	8.5	98.9	99.5	99.5	99.5
COLCHESTER	161	153	5.0	100.0	100.0	98.7	100.0
COLEBROOK	16	16	.0	100.0	100.0	100.0	100.0
COLUMBIA	48	43	10.4	100.0	95.3	93.0	95.3
CORNWALL	14	12	14.3	100.0	100.0	100.0	100.0
COVENTRY	128	118	7.8	100.0	100.0	100.0	99.2
CROMWELL	141	136	3.5	100.0	100.0	100.0	100.0
DANBURY	618	554	10.4	99.5	99.5	98.2	99.3
DARIEN	210	204	2.9	99.5	97.1	96.6	97.1
DEEP RIVER	48	47	2.1	100.0	97.9	97.9	97.9
DERBY	106	99	6.6	98.0	98.0	98.0	96.0
EASTFORD	22	20	9.1	95.0	100.0	100.0	100.0
EAST GRANBY	53	52	1.9	100.0	100.0	100.0	100.0
EAST HADDAM	88	84	4.5	100.0	100.0	98.8	100.0
EAST HAMPTON	135	131	3.0	100.0	100.0	99.2	100.0
EAST HARTFORD	469	410	12.6	100.0	100.0	100.0	99.8
EAST HAVEN	258	229	11.2	100.0	100.0	100.0	100.0
EAST LYME	179	179	.0	100.0	100.0	99.4	100.0
EASTON	83	83	.0	100.0	100.0	100.0	100.0
EAST WINDSOR	96	92	4.2	100.0	100.0	96.7	100.0
ELLINGTON	158	142	10.1	100.0	100.0	99.3	100.0
ENFIELD	505	486	3.8	99.8	99.2	98.8	98.6
ESSEX	68	67	1.5	100.0	100.0	98.5	98.5
FAIRFIELD	508	460	9.4	100.0	99.6	97.8	99.6
FARMINGTON	284	273	3.9	99.6	99.3	97.8	100.0
FRANKLIN	25	25	.0	100.0	100.0	100.0	100.0
GLASTONBURY	374	368	1.6	99.7	99.7	99.7	99.5
GRANBY	117	115	1.7	100.0	100.0	100.0	100.0
GREENWICH	468	429	8.3	99.8	99.3	98.4	99.1
GRISWOLD	130	126	3.1	99.2	100.0	100.0	100.0
GROTON	530	513	3.2	99.8	99.6	98.8	98.8

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PARTICIPATION RATES FOR FOURTH GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1990-1991

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
GUILFORD	301	291	3.3	99.7	99.7	97.9	99.3
HAMDEN	428	411	4.0	99.5	99.8	94.6	99.5
HAMPTON	13	13	.0	100.0	100.0	100.0	100.0
HARTFORD	2,107	1,823	13.5	97.0	96.9	90.9	95.5
HARTLAND	26	26	.0	100.0	100.0	100.0	100.0
HEBRON	136	130	4.4	100.0	100.0	100.0	100.0
KENT	41	35	14.6	100.0	100.0	100.0	100.0
KILLINGLY	218	211	3.2	99.5	97.6	98.1	97.6
LEBANON	101	93	7.9	100.0	100.0	100.0	98.9
LEDYARD	222	219	1.4	100.0	99.1	98.2	99.1
LISBON	50	49	2.0	100.0	100.0	100.0	100.0
LITCHFIELD	92	87	5.4	100.0	98.9	97.7	98.9
MADISON	213	208	2.3	100.0	99.5	100.0	100.0
MANCHESTER	582	573	1.5	99.7	98.8	97.0	98.3
MANSFIELD	136	131	3.7	100.0	100.0	100.0	100.0
MARLBOROUGH	72	69	4.2	100.0	98.6	98.6	98.6
MERIDEN	658	612	7.0	99.8	99.7	98.9	99.5
MIDDLETOWN	339	326	3.8	100.0	99.7	99.4	99.4
MILFORD	474	451	4.9	100.0	100.0	97.8	99.6
MONROE	234	232	.9	99.6	99.6	97.8	99.6
MONTVILLE	207	203	1.9	99.5	100.0	99.0	100.0
NAUGATUCK	396	354	10.6	100.0	100.0	100.0	100.0
NEW BRITAIN	721	613	15.0	100.0	100.0	99.3	99.5
NEW CANAAN	194	191	1.5	100.0	100.0	99.5	100.0
NEW FAIRFIELD	201	200	.5	99.5	99.5	96.5	99.0
NEW HARTFORD	74	73	1.4	100.0	100.0	98.6	100.0
NEW HAVEN	1,465	1,266	13.6	99.3	99.3	97.6	98.4
NEWINGTON	287	283	1.4	99.6	99.6	99.3	100.0
NEW LONDON	270	242	10.4	100.0	100.0	97.9	99.6
NEW MILFORD	319	307	3.8	100.0	99.3	98.7	99.3
NEWTOWN	287	282	1.7	100.0	99.3	99.6	99.6
NORFOLK	26	25	3.8	100.0	100.0	100.0	100.0
NORTH BRANFORD	187	186	.5	100.0	100.0	99.5	100.0
NORTH CANAAN	49	45	8.2	100.0	93.3	93.3	93.3
NORTH HAVEN	232	221	4.7	99.5	99.5	99.1	99.1
NORTH STONINGTON	59	59	.0	100.0	100.0	100.0	100.0
NORWALK	718	674	6.1	99.6	99.4	98.8	98.5
NORWICH	406	381	6.2	100.0	100.0	99.2	99.2
OLD SAYBROOK	121	114	5.8	98.2	99.1	97.4	98.2
ORANGE	166	164	1.2	100.0	100.0	98.8	100.0
OXFORD	149	141	5.4	100.0	100.0	100.0	100.0
PLAINFIELD	184	183	.5	99.5	99.5	96.7	97.8
PLAINVILLE	193	184	4.7	100.0	100.0	100.0	98.9
PLYMOUTH	138	127	8.0	99.2	99.2	96.9	99.2
POMFRET	45	43	4.4	100.0	100.0	100.0	97.7
PORTLAND	84	83	1.2	100.0	100.0	100.0	100.0
PRESTON	49	48	2.0	100.0	100.0	100.0	97.9
PUTNAM	99	96	3.0	100.0	99.0	97.9	97.9
REDDING	103	103	.0	100.0	99.0	99.0	98.1
RIDGEFIELD	258	257	.4	100.0	100.0	99.6	100.0
ROCKY HILL	155	150	3.2	100.0	98.7	97.3	97.3
SALEM	71	68	4.2	100.0	100.0	100.0	100.0
SALISBURY	52	50	3.8	98.0	98.0	98.0	98.0

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PARTICIPATION RATES FOR FOURTH GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1990-1991

DISTRICT	TOTAL FOURTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
SCOTLAND	23	22	4.3	100.0	100.0	95.5	100.0
SEYMOUR	177	159	10.2	100.0	100.0	99.4	100.0
SHARON	25	23	8.0	100.0	100.0	100.0	100.0
SHELTON	387	362	6.5	100.0	99.2	98.6	98.6
SHERMAN	30	30	.0	100.0	100.0	100.0	100.0
SIMSBURY	290	283	2.4	99.6	99.3	99.3	98.9
SOMERS	102	98	3.9	100.0	100.0	98.0	100.0
SOUTHINGTON	437	412	5.7	99.5	99.3	98.1	99.3
SOUTH WINDSOR	312	308	1.3	100.0	100.0	100.0	100.0
SPRAGUE	28	27	3.6	100.0	100.0	100.0	100.0
STAFFORD	168	148	11.9	100.0	98.0	93.9	98.0
STAMFORD	870	825	5.2	99.8	99.9	98.1	99.5
STERLING	39	37	5.1	100.0	100.0	100.0	100.0
STONINGTON	153	146	4.6	100.0	100.0	97.3	100.0
STRATFORD	466	461	1.1	99.6	99.3	98.7	98.9
SUFFIELD	136	136	.0	100.0	100.0	99.3	100.0
THOMASTON	95	90	5.3	100.0	98.9	97.8	98.9
THOMPSON	127	120	5.5	99.2	100.0	100.0	99.2
TOLLAND	149	149	.0	100.0	100.0	100.0	100.0
TORRINGTON	382	349	8.6	100.0	96.6	96.6	96.6
TRUMBULL	372	365	1.9	99.7	99.5	99.2	99.5
UNION	7	7	.0	100.0	100.0	100.0	100.0
VERNON	336	309	8.0	100.0	99.7	99.7	99.4
VOLUNTOWN	35	31	11.4	100.0	100.0	100.0	100.0
WALLINGFORD	451	439	2.7	99.5	100.0	97.5	98.9
WATERBURY	1,083	924	14.7	99.9	99.8	98.7	99.7
WATERFORD	171	166	2.9	100.0	100.0	99.4	100.0
WATERTOWN	254	232	8.7	100.0	99.6	99.6	99.6
WESTBROOK	63	63	.0	100.0	100.0	100.0	100.0
WEST HARTFORD	584	551	5.7	99.6	99.1	98.4	98.7
WEST HAVEN	495	441	10.9	99.8	99.5	98.9	99.5
WESTON	95	92	3.2	97.8	98.9	97.8	96.7
WESTPORT	226	219	3.1	99.5	100.0	100.0	99.5
WETHERSFIELD	224	213	4.9	100.0	100.0	100.0	99.5
WILLINGTON	59	56	5.1	100.0	96.4	100.0	96.4
WILTON	212	212	.0	100.0	100.0	100.0	100.0
WINCHESTER	137	133	2.9	100.0	100.0	100.0	100.0
WINDHAM	272	241	11.4	100.0	99.2	97.5	99.2
WINDSOR	347	339	2.3	99.4	99.7	99.7	98.8
WINDSOR LOCKS	120	113	5.8	100.0	100.0	99.1	100.0
WOLCOTT	147	147	.0	100.0	100.0	99.3	100.0
WOODBRIDGE	82	82	.0	100.0	100.0	98.8	98.8
WOODSTOCK	89	86	3.4	100.0	100.0	100.0	100.0
REG. DIST. NO. 06	75	72	4.0	100.0	100.0	100.0	100.0
REG. DIST. NO. 10	175	168	4.0	100.0	99.4	99.4	99.4
REG. DIST. NO. 12	87	81	6.9	100.0	100.0	98.8	100.0
REG. DIST. NO. 13	132	131	.8	100.0	100.0	98.5	100.0
REG. DIST. NO. 14	128	111	13.3	100.0	100.0	99.1	100.0
REG. DIST. NO. 15	244	233	4.5	100.0	100.0	99.6	100.0
REG. DIST. NO. 16	148	146	1.4	100.0	100.0	100.0	99.3
REG. DIST. NO. 17	142	133	6.3	100.0	100.0	100.0	100.0
REG. DIST. NO. 18	96	90	6.3	100.0	97.8	96.7	97.8

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SCHOOL YEAR 1990-1991

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				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
TOC 1 TOTAL	7,171	6,344	11.5	98.8	98.5	95.6	97.9
TOC 2 TOTAL	7,462	7,027	5.8	99.8	99.5	98.7	99.4
TOC 3 TOTAL	8,684	8,134	6.3	99.8	99.5	98.5	99.0
TOC 4 TOTAL	6,730	6,538	2.9	99.8	99.7	98.9	99.5
TOC 5 TOTAL	3,891	3,726	4.2	99.8	99.4	98.9	99.2
TOC 6 TOTAL	2,885	2,731	5.3	99.8	99.2	98.6	98.9
ERG 1 TOTAL	2,093	2,063	1.4	99.8	99.5	99.2	99.2
ERG 2 TOTAL	6,041	5,809	3.8	99.8	99.5	98.7	99.4
ERG 3 TOTAL	3,898	3,744	4.0	99.9	99.6	99.0	99.5
ERG 4 TOTAL	5,461	5,224	4.3	99.7	99.5	98.3	99.0
ERG 5 TOTAL	4,727	4,498	4.8	99.8	99.6	98.6	99.3
ERG 6 TOTAL	8,796	8,567	2.6	99.8	99.5	98.6	99.2
ERG 7 TOTAL	4,824	4,595	4.7	98.5	98.1	94.5	97.3
STATE TOTAL	36,823	34,500	6.3	99.6	99.3	98.1	99.0

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Connecticut State Department of Education

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